S. HRG. 99-51

SALGADO, FARRELL, GARRISH, AND MERKLEIN NOMINATIONS

HEARING

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE

NINETY-NINTH CONGRESS

FIRST SESSION

ON THE

NOMINATIONS OF JOSEPH F. SALGADO TO BE UNDER SECRETARY OF THE DEPARTMENT OF ENERGY; J. MICHAEL FARRELL TO BE GENERAL COUNSEL, DEPARTMENT OF ENERGY; THEODORE J. GARRISH TO BE ASSISTANT SECRETARY FOR CONGRESSIONAL, INTERGOVERNMENTAL AND PUBLIC AFFAIRS, DEPARTMENT OF ENERGY; AND HELMUT A. MERKLEIN TO BE ADMINISTRATOR OF THE ENERGY INFORMATION ADMINISTRATION, DEPARTMENT OF ENERGY

APRIL 26, 1985

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SALGADO, FARRELL, GARRISH, AND MERKLEIN NOMINATIONS

FRIDAY, APRIL 26, 1985

U.S. SENATE,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The committee met, pursuant to notice, at 9:32 a.m., in room SD-366, Dirksen Office Building, Hon. James A. McClure, chairman, presiding.

Present: Senators McClure, Wallop, Warner, Nickles, Hecht, Evans, Ford, and Melcher.

Also present: Gary G. Ellsworth, chief counsel; E. David Doane, senior counsel; Benjamin S. Cooper, professional staff member for the minority; and James T. Bruce, counsel for the minority.

OPENING STATEMENT OF HON. JAMES A. McCLURE, A U.S. SENATOR FROM THE STATE OF IDAHO

The CHAIRMAN. This is a hearing to consider four Presidential nominations for positions in the Department of Energy. The nominees are Joseph F. Salgado to be Under Secretary, J. Michael Farrell to be general counsel, Theodore J. Garrish to be Assistant Secretary for Congressional, Intergovernmental, and Public Affairs, and Helmut A. Merklein to be Administrator of the Energy Information Administration.

At this time we would like to recognize our colleague on this committee and the distinguished Senator from the State of Virginia to introduce two of the nominees.

Senator WARNER. Fine. I thank the chairman. Perhaps the whole panel should just come on up.

The CHAIRMAN. Why don't you make your statement and then we will proceed from that point.

Senator WARNER. We will do whatever you desire.

STATEMENT OF HON. JOHN W. WARNER, A U.S. SENATOR FROM THE STATE OF VIRGINIA

Senator WARNER. First, it is my pleasure to welcome Michael Farrell, the President's nominee to be General Counsel at the Department of Energy. As General Counsel, Mr. Farrell will be the chief legal advisor at the Department.

He comes to the job with a wide range of legal experience, graduating from Georgetown Law Center in 1966. He has been a lawyer for 19 years, practicing in the public and private sector.

He has been a litigator, a Government attorney, and an adjunct law professor. He has worked in the White House, State Department, and Federal Home Loan Bank Board.

Indeed it is my privilege to present him this morning, an outstanding candidate, having been selected by the President for this most important post. And I think, Mr. Chairman, he is joined this morning by his wife, Mrs. Farrell.

Following that, Mr. Chairman, I am also delighted to introduce a fellow Virginian, Theodore J. Garrish, nominated for the position of Assistant Secretary of Energy for Congressional, Intergovernmental, and Public Affairs.

Mr. Garrish is eminently qualified for his new duties. In 1983, it was my pleasure to introduce Mr. Garrish as the nominee for General Counsel at the Energy Department. In the past 2 years, he has done an outstanding job in that position. As the Department's chief legal advisor, Mr. Garrish was involved in major aspects of every energy issue that came before the Department.

In addition to being well versed in energy issues, Mr. Garrish is experienced in congressional affairs. As the first in charge of drafting legislation for the Energy Department, he worked closely with this committee and developed a good rapport with its members.

Before serving as General Counsel to the Department of Energy, Mr. Garrish worked as Legislative Counsel for the Interior Department, dealing with various energy-related issues.

As an attorney in the private sector, Mr. Garrish specialized in natural resource matters. Before going into private practice, he served as General Counsel to the Consumer Product Safety Commission and also directed the enforcement operation at the Commission during his tenure there.

As you can see, Mr. Chairman, the nominee has already had a distinguished career in public service.

It is my pleasure to present this distinguished nominee and suggest to the committee that he is eminently qualified for the position.

The CHAIRMAN. Thank you very much. I am sure that the candidates for these positions are grateful for your introduction. You have the opportunity, which is greater than some, because some people seem to settle in Virginia on their way to the District.

Senator WARNER. Well, since you and I spent a little time in Idaho together, it's equal.

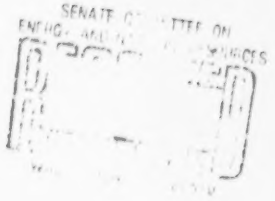
The CHAIRMAN. Thank you very much, Senator.

[A statement in support of Mr. Garrish submitted for the record by Senator Trible follows:]

PAUL TRIBLE
VIRGINIA

United States Senate

WASHINGTON, D.C. 20510



April 25, 1985

The Honorable James A. McClure
Chairman
Committee on Energy and Natural Resources
Washington, D.C. 20510

Dear Mr. Chairman:

I ask that you place the enclosed statement in the record of proceedings on the nomination of Ted Garrish to be Assistant Secretary for Congressional, Intergovernmental and Public Affairs at the Department of Energy.

Although I am unable to personally attend the hearing, I would like to recommend Ted to the Committee. I believe that he will be a real asset to the Department, as well as to us on the Hill.

Thank you for your courtesy.

Sincerely,

Paul S. Trible

PST:edw

STATEMENT OF HON. PAUL TRIBLE, A U.S. SENATOR FROM THE STATE OF VIRGINIA

Mr. Chairman, I would like to take this opportunity to recommend to the Committee and to our colleagues in the Senate the confirmation of Mr. Theodore J. Garrish as the Assistant Secretary for Congressional, Intergovernmental, and Public Affairs.

Mr. Garrish has had wide experience in the energy field, most recently as General Counsel to the Energy Department. He has demonstrated his capabilities during an exemplary career in public service and in the private sector. He has always conducted himself in a professional manner, living up to the high standards of ethics which the American people expect of public servants.

Mr. Garrish has also demonstrated a sensitivity to Congressional concerns; he has been responsive and accessible when we in Congress have sought his assistance. I know these practices will continue when he is confirmed as head of Congressional Affairs at the Energy Department.

Mr. Chairman, I strongly recommend Ted Garrish to the Committee. His ability and character make him an important asset to the Energy Department and to the federal government. We are very fortunate to have such a distinguished nominee.

The CHAIRMAN. Senator Ford, do you have an opening statement?

Senator FORD. No, I don't.

The CHAIRMAN. Senator Evans.

Senator EVANS. No.

The CHAIRMAN. Senator Hecht.

Senator HECHT. No.

The CHAIRMAN. I would insert in the record at this point a statement by Senator Phil Gramm, introducing a fellow Texan, Dr. Helmut Merklein, to the committee today. It will be made a part of the record at this point.

[The prepared statement of Senator Phil Gramm follows:]

PHIL GRAMM
TEXAS

United States Senate
WASHINGTON, D.C. 20510

April 24, 1985

MR. CHAIRMAN,

I am pleased today to introduce a fellow Texan, Dr. Helmut A. Merklein, to the Committee.

Dr. Merklein is a specialist in energy economics and international finance and he brings considerable experience to the Department of Energy.

He has taught economics at the University of Dallas and Texas A&M University. In November of 1983, he was confirmed as Assistant Secretary for International Affairs at the Department of Energy and in December of 1984, he was appointed Administrator of the Energy Information Administration at DOE.

Dr. Merklein also has a broad and varied background in the private sector, having worked for an international energy consulting firm, and a U.S. oil company as a petroleum engineer.

He has published more than 100 articles and has authored and co-authored several books dealing primarily with energy economics.

Thank you for allowing me this opportunity to introduce Dr. Merklein to the Committee.

Phil Gramm

The CHAIRMAN. We are pleased to be joined this morning by the distinguished Senator from California, Mr. Wilson.

Pete, would you care to take the chair and make your statement?

STATEMENT OF HON. PETE WILSON, A U.S. SENATOR FROM THE STATE OF CALIFORNIA

Senator WILSON. Thank you very much, Mr. Chairman.

Just 2 months ago, I came before this distinguished committee to present another distinguished Californian, John Herrington, for confirmation to the position of Secretary of Energy.

Today I return to introduce another Californian who has been appointed by the President to make his team at the Department complete. I have the high honor to introduce Mr. Joseph Salgado, designated to serve in the capacity of Under Secretary of Energy.

Mr. Chairman, Mr. Salgado comes to the Department from the White House where he served as Associate Director for Presidential Personnel. In that position, he coordinated appointments to various agencies, including the Department of Energy, the Federal Energy Regulatory Commission, and the Nuclear Regulatory Commission.

Mr. Salgado's familiarity with the agencies and personalities with whom he will be working will, I am sure, facilitate his early ability to play a vital role in the management of the Department of Energy.

Prior to his work at the White House, Mr. Salgado held a position with the Immigration and Naturalization Service, as well as the office of Alameda district attorney—or in the district attorney's office—and the Oakland Police Department.

He is a graduate of the University of San Francisco and has earned a jurisdoctor degree from the San Francisco School of Law. His professional associations include the American and Hispanic Bar Associations and the American Society for Public Administration.

Mr. Salgado reflects his Hispanic heritage proudly. His appointment confirms the continuing effort by the President to bring all groups of Americans into his administration.

Mr. Chairman, Joseph Salgado brings a competence and professionalism to the Department of Energy that will complement the new leadership of this Agency. I look forward to working with him to ensure that our national energy objectives are achieved, and I present him with great pleasure to this committee in full confidence that you will concur in the President's judgment.

I think his record in a variety of capacities demonstrates great capacity, great competence, and great dedication to public service.

The CHAIRMAN. Thank you very much, Senator. I'm sure Mr. Salgado appreciates your effort to come here, not as a member of the committee, but as a special opportunity and a special service to both him and to the administration.

Thank you for appearing.

Senator WILSON. Thank you very much, Mr. Chairman.

The CHAIRMAN. Our first witness today is Joseph F. Salgado, who has been nominated for Under Secretary of the Department of Energy. As one of the principal officers of the Department of

Energy, Mr. Salgado would carry out duties delegated by the Secretary, and he would also have primary responsibility for energy conservation in accordance with an express requirement of the Department of Energy Organization Act.

Mr. Salgado is currently serving as transition coordinator for Secretary Herrington at DOE. He was previously an Associate Director in the White House Presidential Personnel Office and Associate Commissioner for Enforcement at the Department of Justice.

For some years, Mr. Salgado served as a senior trial attorney and deputy district attorney for Alameda County, CA.

Before you begin your statement, Mr. Salgado, the rules of the committee which apply to all nominees require that they be sworn in connection with their testimony.

Will you please rise and raise your right hand.

[Whereupon Joseph F. Salgado was duly sworn by the chairman.]

The CHAIRMAN. There are four questions addressed to witnesses before this committee who are nominated for positions in the administration. I would like to ask these questions of you.

Will you be available to appear before this committee and other congressional committees to represent departmental positions and respond to issues of concern to the Congress?

Mr. SALGADO. I will, sir.

The CHAIRMAN. Your informational statement has been submitted to the committee. However, it is required that this statement be made public unless the committee decides that special circumstances justify an exception.

Do you have any objection to the publication of your informational statement?

Mr. SALGADO. I have no objection.

The CHAIRMAN. Are you aware of any personal holdings, investments, or interests that could constitute a conflict of interest or create the appearance of such a conflict, should you be confirmed and assume the office to which you've been nominated by the President?

Mr. SALGADO. Sir, my investments, personal holdings, and other interests have been reviewed both by myself and the appropriate ethics counselors within the Federal Government. I have taken appropriate action to avoid any conflicts of interest. There are no conflicts of interests, or appearances thereof, to my knowledge.

The CHAIRMAN. Are you involved in, or do you have any assets held in blind trusts?

Mr. SALGADO. No, I do not, sir.

The CHAIRMAN. Mr. Salgado, you may proceed with your statement at this time, please.

STATEMENT OF JOSEPH F. SALGADO, NOMINEE TO BE UNDER SECRETARY, DEPARMENT OF ENERGY

Mr. SALGADO. Thank you very much, Mr. Chairman, and my thanks to Senator Wilson for the kind introduction from my home State of California.

Senator, members of the committee, I am honored to appear before you today as President Reagan's nominee to be Under Secretary of Energy. My formal statement has been circulated to the

committee and I would like now to briefly summarize the information it contains.

The CHAIRMAN. The entire statement will be made a part of the record, and you're free to summarize.

Mr. SALGADO. Thank you.

My education is that of philosophy, and I hold a jurisprudence degree in law. I began my professional career in law enforcement with the Oakland Police Department, later became a deputy district attorney and a senior trial attorney with the county of Alameda district attorney's office. I also served as an instructor at the San Francisco Law School.

I came to Washington, DC, to serve with the President in 1982 as Associate Commissioner for Enforcement with the Department of Justice in the Immigration and Naturalization Service. Later, I was asked to go to the White House and I became an Associate Director for Presidential Personnel under Mr. Herrington, Assistant to the President at that time.

While serving in the White House, I was responsible for the Departments of Energy, Interior, State, and Defense, and the Nuclear Regulatory Commission, Federal Energy Commission, and Council on Environmental Quality.

Most recently, I've gone to the Department of Energy to serve as Mr. Herrington's transition coordinator.

Mr. Chairman, I want to assure you and members of this committee that I share the commitment Secretary Herrington made to work closely with you in this committee and the Congress if I am confirmed as Under Secretary.

Secretary Herrington has indicated his intention that the Under Secretary will serve as the chief operating officer at the Department of Energy, and will fully discharge the primary reponsibilities for energy conservation which is assigned by statute to the Under Secretary.

In this connection, I will work closely with the Assistant Secretary for Conservation and Renewable Energy, a position that Secretary Herrington has recently reinstated, as you are well aware. If confirmed, I will be an advocate for a broad range of energy technologies and fuels, including nuclear, coal, renewables, oil and gas.

As Under Secretary, I would give my personal attention and full support to our national laboratories and to the Department's enterprise activities related to power marketing, uranium enrichment, and the strategic petroleum reserve.

Finally, I share the high priority Secretary Herrington has assigned to assuring that DOE's operations comply with high standards of health, safety, and environmental protection.

In closing, Mr. Chairman, let me reiterate that, if confirmed, I will seek and consider the views of you, Mr. Chairman, and each member of this committee, and I will work cooperatively with you to assure a secure and stable energy future.

And I would be happy to answer any questions, sir.

[The prepared statement of Mr. Salgado follows:]

STATEMENT OF

JOSEPH F. SALGADO

NOMINEE FOR THE POSITION OF

UNDER SECRETARY

OF THE DEPARTMENT OF ENERGY

BEFORE THE SENATE COMMITTEE

ON ENERGY AND NATURAL RESOURCES

APRIL 26, 1985

MR. CHAIRMAN, MEMBERS OF THE COMMITTEE:

I WELCOME THIS OPPORTUNITY TO APPEAR BEFORE YOU AS PRESIDENT REAGAN'S NOMINEE TO BE UNDER SECRETARY OF ENERGY.

IF CONFIRMED, I LOOK FORWARD TO SERVING WITH SECRETARY HERRINGTON AT THE DEPARTMENT OF ENERGY, AND I SHARE THE COMMITMENT HE MADE TO WORK CLOSELY WITH THE CONGRESS AND MEMBERS OF THIS COMMITTEE IN CARRYING OUT THE PRESIDENT'S NATIONAL ENERGY POLICY AND FULFILLING THE MANDATES CONGRESS HAS ESTABLISHED FOR THE DEPARTMENT.

I HAVE HAD THE PLEASURE OF WORKING WITH SECRETARY HERRINGTON DURING HIS TENURE IN THE OFFICE OF PRESIDENTIAL PERSONNEL AND, MORE RECENTLY, AS HIS TRANSITION COORDINATOR AT THE DEPARTMENT OF ENERGY. HIS VIEW OF ENERGY AS A PRINCIPAL COMPONENT OF OUR ECONOMIC AND NATIONAL SECURITY IS ONE WITH WHICH I AM IN FULL AGREEMENT. IF CONFIRMED AS UNDER SECRETARY OF THE DEPARTMENT, I WILL ASSURE THAT THE DEPARTMENT'S PROGRAMS ARE DESIGNED AND IMPLEMENTED TO STRENGTHEN OUR NATION'S SECURITY, LEADERSHIP AND INTERNATIONAL COMPETITIVENESS.

PERSONAL QUALIFICATIONS:

I HAVE SPENT MY ENTIRE CAREER IN PUBLIC SERVICE. THROUGH A VARIETY OF POSITIONS I HAVE GAINED EXPERIENCE IN POLICY DEVELOPMENT; PUBLIC PROGRAM MANAGEMENT AND EVALUATION; STRATEGIC PLANNING; AND BUDGET AND MANPOWER ADMINISTRATION.

MY EDUCATIONAL BACKGROUND IS IN PHILOSOPHY AND THE LAW. I EARNED MY B.S. DEGREE FROM THE UNIVERSITY OF SAN FRANCISCO IN 1968 AND MY J.D. DEGREE FROM SAN FRANCISCO LAW SCHOOL IN 1972, WHILE SERVING AS SERGEANT OF POLICE WITH THE OAKLAND, CALIFORNIA POLICE DEPARTMENT.

AFTER EARNING MY LAW DEGREE, I JOINED THE DISTRICT ATTORNEY'S OFFICE IN ALAMEDA COUNTY, ONE OF THE LARGEST DISTRICT ATTORNEY'S OFFICES IN THE STATE OF CALIFORNIA. AS SENIOR TRIAL ATTORNEY AND DEPUTY DISTRICT ATTORNEY, I GAINED EXTENSIVE EXPERIENCE IN TRIAL LITIGATION AND HAD RESPONSIBILITY FOR TRAINING, EVALUATION, AND PERSONNEL MANAGEMENT OF 125 ATTORNEYS.

IN 1982, I JOINED THE REAGAN ADMINISTRATION AS ASSOCIATE COMMISSIONER FOR ENFORCEMENT OF THE IMMIGRATION AND NATURALIZATION SERVICE. IN THIS POSITION I HAD OVERALL POLICY AND PLANNING RESPONSIBILITIES FOR FIVE MAJOR DIVISIONS REPRESENTING A STAFF OF MORE THAN 5,000 AND A BUDGET IN EXCESS OF $220 MILLION. I PROVIDED POLICY FORMULATION, MANAGEMENT AND TECHNICAL SUPPORT TO INS REGIONAL OFFICES AND THROUGH THEM TO DISTRICT OFFICES AND BORDER PATROL SECTORS.

SUBSEQUENT TO MY SERVICE WITH THE DEPARTMENT OF JUSTICE, I JOINED JOHN HERRINGTON AT THE WHITE HOUSE AS ASSOCIATE DIRECTOR FOR PRESIDENTIAL PERSONNEL. THERE I WAS RESPONSIBLE FOR APPOINTMENTS AT THE DEPARTMENTS OF ENERGY, INTERIOR, STATE AND DEFENSE; THE NUCLEAR REGULATORY COMMISSION; THE FEDERAL ENERGY REGULATORY ADMINISTRATION; AND THE COUNCIL ON ENVIRONMENTAL QUALITY, AS WELL AS AMBASSADORIAL APPOINTMENTS AND THE SELECTION OF DELEGATIONS REPRESENTING THE PRESIDENT AT VARIOUS INTERNATIONAL EVENTS.

I BELIEVE MY TRAINING AND EXPERIENCE IN A VARIETY OF POSITIONS REQUIRING PLANNING, MANAGEMENT, AND ADMINISTRATIVE SKILLS WILL ENABLE ME TO EFFECTIVELY DISCHARGE THE RESPONSIBILITIES OF THE UNDER SECRETARY OF ENERGY.

I WOULD LIKE NOW TO COMMENT BRIEFLY ON THE DEPARTMENT OF ENERGY AND THE ROLE OF THE UNDER SECRETARY.

THE ROLE OF THE UNDER SECRETARY

IN MY DISCUSSIONS WITH SECRETARY HERRINGTON, HE HAS DIRECTED THAT THE UNDER SECRETARY'S ROLE WILL BE TO FUNCTION AS THE DEPARTMENT'S CHIEF OPERATING OFFICER AND TO DISCHARGE HIS UNIQUE STATUTORY RESPONSIBILITIES IN THE AREA OF ENERGY CONSERVATION.

I BELIEVE THE DEPARTMENT OF ENERGY HAS AN IMPORTANT ROLE TO PLAY IN FACILITATING ENERGY CONSERVATION. DOE'S RESEARCH AND DEVELOPMENT PROGRAMS ARE ESSENTIAL TO PROVIDING ENERGY EFFICIENT TECHNOLOGY OPTIONS TO THE MARKET. THE RESULTS OF THESE PROGRAMS MUST BE EFFECTIVELY AND PROMPTLY TRANSFERRED TO THE MARKETPLACE. IN ADDITION, THE DEPARTMENT MUST CONTINUE TO WORK COOPERATIVELY AND EFFECTIVELY WITH STATE AND LOCAL INTERESTS IN CONNECTION WITH THE ENERGY ASSISTANCE PROGRAMS MANDATED BY THE CONGRESS.

AS YOU KNOW, SECRETARY HERRINGTON HAS REINSTATED THE POSITION OF ASSISTANT SECRETARY FOR CONSERVATION AND RENEWABLE ENERGY. I WANT TO ASSURE THE MEMBERS OF THIS COMMITTEE THAT IF I AM CONFIRMED, I WILL WORK CLOSELY WITH THE ASSISTANT SECRETARY AS A STRONG ADVOCATE FOR THE PROGRAMS AND ACTIVITIES CONDUCTED BY THE DEPARTMENT IN ENERGY CONSERVATION. I AM COMMITTED TO SEEKING AND FULLY CONSIDERING YOUR VIEWS AND SUGGESTIONS AND TO MAINTAINING A CONSTRUCTIVE DIALOGUE ON THE DEPARTMENT'S ENERGY CONSERVATION ACTIVITIES.

I REALIZE THAT CONSERVATION IS ONLY ONE COMPONENT OF A STABLE AND SECURE ENERGY FUTURE FOR THIS COUNTRY. IF I AM CONFIRMED, I WILL ADVOCATE WITH EQUAL CONVICTION FOR VARIOUS ENERGY SUPPLY OPTIONS, INCLUDING NUCLEAR, COAL, AND RENEWABLES, AS WELL AS OIL AND NATURAL GAS.

I BELIEVE THAT THE DEPARTMENT OF ENERGY THROUGH ITS RESEARCH AND DEVELOPMENT PROGRAMS HAS A CRITICAL ROLE TO PLAY IN PRESERVING NUCLEAR POWER AS A FUTURE SOURCE OF ENERGY SUPPLY; ASSURING THAT WE FULLY AND ECONOMICALLY DEVELOP OUR FOSSIL RESOURCES -- PARTICULARLY COAL; AND SUPPORTING THE DEVELOPMENT OF A STRONG RENEWABLES INDUSTRY IN SOLAR AND RELATED TECHNOLOGIES. AT THE SAME TIME, DOE MUST CONTINUE ITS EFFORTS WITH NRC AND THE CONGRESS TO IMPROVE NUCLEAR REGULATION AND TO DEVELOP A SOUND WASTE MANAGEMENT PROGRAM -- ESSENTIAL STEPS IN BUILDING PUBLIC CONFIDENCE IN THE SAFETY AND RELIABILITY OF NUCLEAR POWER. LIKEWISE, THE DEPARTMENT'S PARTICIPATION IN INTERAGENCY AND INTERNATIONAL RESEARCH AND RELATED ACTIVITIES ON ACID RAIN IS CRITICAL TO PROMOTING CONTINUED DEVELOPMENT OF OUR COAL RESOURCES.

IN ADDITION TO ITS RESEARCH AND DEVELOPMENT PROGRAMS, THE DEPARTMENT OF ENERGY HAS UNIQUE AND ESSENTIAL RESPONSIBILITIES IN BASIC RESEARCH AND IN THE PRODUCTION OF NUCLEAR WEAPONS. THE LABORATORIES AT WHICH DOE'S DEFENSE, RESEARCH, AND R&D PROGRAMS ARE CARRIED OUT ARE CRITICAL TO THE DEPARTMENT'S MISSION, AND THEY WILL RECEIVE MY PERSONAL ATTENTION AND FULL SUPPORT IF I AM CONFIRMED.

AS YOU KNOW, THE DEPARTMENT ALSO IS CHARGED WITH SIGNIFICANT RESPONSIBILITIES FOR SEVERAL ENTERPRISE FUNCTIONS -- URANIUM ENRICHMENT, POWER MARKETING ADMINISTRATIONS, AND THE STRATEGIC PETROLEUM RESERVE. I AM MINDFUL THAT IN EACH OF THESE PROGRAMS WE FACE IMPORTANT ISSUES AND DECISIONS WITHIN THE NEAR FUTURE, AND I PLEDGE THAT I WILL WORK CLOSELY WITH YOU, MR. CHAIRMAN, THIS COMMITTEE AND OTHER MEMBERS OF THE CONGRESS TO RESOLVE THE ISSUES AND FACILITATE SOUND DECISIONMAKING PROCESSES CONSISTENT WITH OUR OBJECTIVE OF A SECURE AND STABLE ENERGY FUTURE.

FINALLY, I WANT TO ACKNOWLEDGE MY COMMITMENT TO THE PRINCIPLES OF PUBLIC AND WORKER HEALTH AND SAFETY AND THE PROTECTION OF ENVIRONMENTAL QUALITY. IF I AM CONFIRMED AS UNDER SECRETARY, I WILL JOIN SECRETARY HERRINGTON IN THE HIGH PRIORITY HE HAS ASSIGNED TO MAINTAINING THE DEPARTMENT'S OUTSTANDING HEALTH, SAFETY AND ENVIRONMENTAL PERFORMANCE AT ITS FACILITIES AND TO ASSURING THAT ALL OF THE DEPARTMENT'S OPERATIONS COMPLY WITH THE HIGHEST STANDARDS.

IN CLOSING, I WOULD BE REMISS IF I DID NOT NOTE HOW IMPRESSED I HAVE BEEN WITH THE DEDICATION AND SKILL OF THE DEPARTMENT'S PERSONNEL. I LOOK FORWARD TO THE OPPORTUNITY OF WORKING WITH THEM AND MEETING THE CHALLENGES WHICH HAVE BEEN OFFERED TO ME. I WANT TO REITERATE MY STRONG COMMITMENT TO WORKING COOPERATIVELY WITH EACH MEMBER OF THIS COMMITTEE AND RENEW MY PLEDGE TO SEEK AND FULLY CONSIDER YOUR VIEWS AND SUGGESTIONS.

THANK YOU.

The CHAIRMAN. Thank you very much, Mr. Salgado.

For the past 2 months, you've been serving as transition coordinator for Secretary Herrington. Does that suggest that there are major organizational changes underway at the Department?

Mr. SALGADO. No, sir; it does not suggest that there are major organizational changes underway. I would indicate that Secretary Herrington is undertaking an intensive review of personnel, programs, and policies.

The CHAIRMAN. What's been the nature of your work during the past 2 months as transition director?

Mr. SALGADO. Mr. Chairman, the work has been one of facilitating the briefings and the decisionmaking process for the Secretary for issues that have arisen in the past 2 months, as well as a coordinating the review of related programs, policies, and personnel. I have also assisted in the screening of candidates for vacancies that currently exist.

The CHAIRMAN. Well, I think the fact that you have a long association with the Secretary led him to make not only the recommendation that you be appointed, but also led him to say in some private conversations which I had with him before he had assumed his job that he expected he would be asking you to undertake a major role because he had such great confidence in you. That's a tribute in itself.

Mr. SALGADO. It is, sir. I must admit I believe that you had the conversation with him before he had any conversation with me.

The CHAIRMAN. Senator Ford.

Senator FORD. Thank you, Mr. Chairman. I only have one or two questions.

Mr. Salgado, on page 3 of your testimony, you discuss the role of the Under Secretary. What specific assignments has the Secretary given to you as Under Secretary?

Mr. SALGADO. As Under Secretary, sir, the Secretary has indicated that the role of the Under Secretary will be, No. 1, to act as the chief operating officer within the Department, to facilitate the day-by-day operations of the Department, to ensure that the policies established by the Secretary are efficiently and effectively carried out.

The second aspect, of course, is the primary responsiblity for conservation, which is statutorily mandated. And I would hope also, sir, as my technical knowledge and knowledge of the Department

increase, that I will play a role in the overall policy direction, or at least participate in the policy decisionmaking processes.

Senator FORD. How do these assignments differ from your predecessors?

Mr. SALGADO. My immediate predecessor as Under Secretary was Mr. Collins, Pat Collins. It is my understanding that his duties and responsibilities, as assigned by Secretary Hodel were, No. 1, the primary responsibility of conservation which is mandated by law, as well as having three of the power marketing associations reporting to him.

The other functions of coordinating the overall day-by-day operations, I believe, fell to Mr. Hodel's special assistant, Earl Gjelde. So there is a distinction, sir.

Senator FORD. So there has been some changes in your assignments and your immediate predecessors?

Mr. SALGADO. Yes, sir.

Senator FORD. To whom do you report, then?

Mr. SALGADO. In the chain of command, sir, I would report directly to and through the Deputy Secretary to the Secretary.

Senator FORD. With your closeness to the Secretary, do you expect you'll just be chatting with him directly?

Mr. SALGADO. It depends on the particular issues, sir. There are certain issues in which the Deputy Secretary has historically not been involved, and I would imagine that due to my longstanding relationship with the Secretary, on those issues I would be able to speak directly to the Secretary.

In areas of policy, I would hope that there would be a management team of upper level management, those with technical expertise would participate, of which I would hope to be one.

Senator FORD. What other issues would you discuss, or do you think you would discuss with the Secretary, going around the Deputy Secretary?

Mr. SALGADO. I don't like the concept of going around. I guess what I would indicate——

Senator FORD. I think that's just what you said, you know. When you restructure something, sometimes it's called overthrow.

Mr. SALGADO. I would imagine that there are certain things, elementary things such as the signing of various letters recommended by Assistant Secretaries through the normal process of things that will be taken directly to the Secretary's executive staff to facilitate that movement of paper.

On any major policy decision or major administration decision, there will be coordination, I'm sure, through the Deputy Secretary's office.

Senator FORD. So basically, you're just going to take letters in for him to sign.

Mr. SALGADO. I don't know what the specifics are or any individual thing now that may create any difference.

Senator FORD. Thank you, Mr. Chairman.

The CHAIRMAN. Senator Warner.

Senator WARNER. Mr. Salgado, the Secretary had a press conference with wire service reporters about 4 or 5 weeks ago, and the report clearly indicated the strong emphasis Secretary Herrington

is going to put on coal research, and indeed clean coal-burning technologies.

Are you familiar with that subject?

Mr. SALGADO. Yes, sir; I am.

Senator WARNER. Would you kindly inform the committee of your views? Do they coincide with those of the Secretary?

Mr. SALGADO. Yes, Senator; they do. Coal is one of the indigenous resources that we have within this country. To ignore clean coal technology and its utilization in our overall balanced energy mix would be a mistake as to the energy security of this country. And I do support the Secretary's intention to maintain a strong position in the development of fossil and particularly in the clean coal technology areas.

Senator WARNER. Congress anticipates on the May 1 receiving from the Secretary a transmittal letter with respect to certain of his views on specific proposals for the clean burning of coal.

Are you familiar with that event?

Mr. SALGADO. Yes, sir; I am.

Senator WARNER. Will it take place on or about May 1?

Mr. SALGADO. The Secretary is committed to having that report submitted to the Congress on May 1, and I am assured that it is on schedule and it will be submitted on time.

Senator WARNER. I am pleased to hear that you join him in placing a strong emphasis on clean coal-burning technology.

Thank you very much, Mr. Chairman.

The CHAIRMAN. Senator Evans.

Senator EVANS. Thank you, Mr Chairman.

Mr. Salgado, in looking at your background, it's a distinguished background but included in there is not much in the way of experience in energy issues.

Would you care to elaborate on any experience you've had in energy issues the Department will be facing?

Mr. SALGADO. Senator, my nexus with the various energy issues came from approximately the year and a half that I served as Associate Director for Presidential Personnel where I did gain an understanding of the broad issues facing the energy area, and that was when I was responsible for the Department of Energy, the Department of the Interior, Nuclear Regulatory Commission, FERC, CEQ, and the TVA.

As I envision the role of the Under Secretary, it will be one of management to facilitate the decisions in an effective and efficient manner. And I would hope, given my background both legally and my experience in management, that I will be what is referred to, Senator, as a quick study to learn those particular issues so that I can better assist in the policy decisions.

Senator EVANS. In your statement—referring to the same section that Senator Ford referred to on the role of the Under Secretary as chief operating officer—would that include, in your view, a major role in the planning and coordination of energy policy within the Department?

Mr. SALGADO. It would, sir, in the context that as we brought together the various highly qualified and technical people in the Department for the formulation of the Secretary's overall goals and objectives in establishing the national energy policy, I would see

myself in a role helping to coordinate and having some input in those areas.

Senator EVANS. Have you had an opportunity yet to develop any initial ideas on the current state of coordination in energy planning in the Federal Government?

Mr. SALGADO. I have not at this particular time, Senator, determined any particulars in that particular area.

Senator EVANS. I suspect when you do find out, you'll find there is a big job to be done. We've got a long way to go.

In your statement you say that you're impressed with the dedication and the skill of Department of Energy employees. We've had a fairly substantial number of changes at the top during the course of the last several years for a variety of reasons.

What is your sense of the current morale and motivation level of the employees in the Department?

Mr. SALGADO. Unfortunately, any time that there is a change in high-level management and administrative personnel, there is an uncertainty that attaches to that and there is an anxiety level that cannot help but be felt by the career employees.

I do believe the morale is good and the competency level is high, but there is always room for improvement, and hopefully with the stability Mr. Herrington will bring to the Department, we will increase and build upon what I consider an outstanding career service personnel.

Senator EVANS. In your view, how much concern is involved with the employees in some of the talks about possible merger of the Department with the Department of the Interior or reorganization of Federal departments?

Has that been a concern?

Mr. SALGADO. Senator, I don't have personal knowledge, but I can only infer that any time that various departments are considered either for merger or abolishment, that the anxiety level will increase and is of concern.

Senator EVANS. I was happy to see that the Secretary has renewed efforts in the field of conservation. This will be one of your particular responsibilities. The new Assistant Secretary, I presume, will be sent up for confirmation sometime soon. How is that whole thing going to evolve into a working relationship?

Will Energy Conservation report directly to you and through you to the Deputy, or to the Secretary himself, or will he be a part of the top management team? Once you have an Assistant Secretary in place for Conservation and Renewables, how is that relationship going to be with the other top officials?

Mr. SALGADO. Senator, I envision that at least with the reestablishment of the Assistant Secretary for Conservation and Renewable Energy, that that individual will have the day-by-day operational responsibilities, the technical knowledge for developing overall strategy and policy, and will work closely with the Under Secretary—myself hopefully, if I am confirmed—to develop those overall policies and to communicate those both to the Deputy and to the Secretary.

Senator EVANS. In your statement you go into some detail on research and development programs, especially in the field of energy conservation.

Do you have any particular ideas as to priorities or directions or elements you'd particularly like to see pursued in that field, or should we ask that question sometime later?

Mr. SALGADO. Senator, I don't have probably an in-depth knowledge to go through an analysis of the R&D projects. If confirmed, I would hope that during the budget process of the upcoming year I would have an opportunity to review the various projects and to make some determinations upon those at least that I personally feel or would recommend to the Secretary should be enhanced.

Senator EVANS. I don't know to what degree you're familiar with the power marketing authorities that abound in the country, and of course, as you might guess, I have a particular interest in the largest one of those—Bonneville.

Do you share the Secretary's views about the necessity for certainty in the planning environment for energy users in these power marketing agencies, particularly in the Pacific Northwest?

Mr. SALGADO. Yes, sir; I do. I share the Secretary's belief in industrial stability, economic and social stability, that these power marketings can and do bring to various regions.

Senator EVANS. To what degree are you aware of some of the proposals of the Office of Management and Budget for radical changes in repayment programs in those power marketing agencies?

Mr. SALGADO. I am aware of the payback schedules that have been proposed, Senator. Some of those would cause some drastic increases in the basic rates, approximately anywhere between 61 and 82 percent. So I have some knowledge of that particular issue, limited as it is.

Senator EVANS. I understand the necessity of departments being good soldiers when the administration has made some decisions on the direction they'd like to take in budget matters. I'd be curious about your views as to the relationship of sudden rate increases of that nature, vis-a-vis the necessity for certainty in the planning environment.

Mr. SALGADO. Secretary Herrington has the commitment to this committee that he is a strong believer in the industrial stability and economic stability of these areas, and that within the administration he is a strong advocate to maintain that stability.

Senator EVANS. Thank you, Mr. Chairman.

The CHAIRMAN. Senator Hecht.

Senator HECHT. Nothing, Mr. Chairman.

The CHAIRMAN. Senator Nickles.

Senator NICKLES. Thank you, Mr. Chairman.

I don't have any questions for our panelist, Mr. Salgado, but I would like to just make a couple of general comments concerning some of the other nominees. One would be my strong support for Ted Garrish. We've had the pleasure of working with Mr. Garrish before this committee for the last several years, and I have found him to be an outstanding person to work with, and I think he's served the administration and this country well.

Also, Mr. Chairman, it's my pleasure, too, to strongly endorse and support the nomination of Dr. Merklein. He is now serving as the Administrator of the Energy Information Administration by a recess appointment. I hope that he also will be confirmed. Dr. Merklein is a graduate of Oklahoma University in petroleum engi-

neering with the dubious or unusual qualification of also having a Ph.D. from Texas A&M as well.

Senator FORD. Can you tell me which side he sits on at the football games?

Senator NICKLES. I had to make sure of that before I would say anything. [Laughter.]

No; I think Dr. Merklein will do a good job. As I've told others before, I think a lot of things that we do with the Energy Information Administration could probably be elsewhere. We could save a little money if we'd just take a subscription to the Oil & Gas Journal and not try and duplicate some of the things that are already done in the private sector. I understand that you're in the process of trying to save some money, something along those guidelines.

I'm confident that you'll do a good job, Dr. Merklein, and we look forward to working with you and the rest of the nominees.

So I thank the Chairman.

The CHAIRMAN. Thank you.

I have just one followup question. Senator Evans explored a little the relationship of yourself to that of the Assistant Secretary in the area which, by statute, you're assigned some primary responsibility.

In terms of your role, as you describe it, as the chief operating officer, what would be your relationship to all of the Assistant Secretaries?

Mr. SALGADO. Mr. Chairman, I would envision that the role of the chief operating officer, again, would be to facilitate timely, orderly, efficient, and effective decisionmaking; that I would serve as a coordinating area for that; that in particular areas of overall policy and direction, the Secretary and the Deputy Secretary would be intimately involved in those decisions.

It would be a role to ensure that the operation and the management of the Department move smoothly and efficiently.

The CHAIRMAN. There is a unique responsibility assigned by statute, but other than that special responsibility, the relationship with each of the Assistant Secretaries would be the same?

Mr. SALGADO. I would envision it as the same; merely, again, operating the day-by-day management so as to not to encumber the Deputy or the Secretary themselves except in those areas that are needing their immediate attention.

The CHAIRMAN. Thank you very much. I appreciate your testimony.

If there are no further questions, you may be excused. Thank you very much for your appearance.

Mr. SALGADO. Thank you very much, Mr. Chairman.

The CHAIRMAN. We'll turn now to Mr. Farrell, nominated to be General Counsel for the Department of Energy. Mr. Farreli has a professional background that includes several positions in the Federal Government, as well as 14 years in private law practice.

He has served in the State Department as Legislative Coordinator for the Caribbean Basin Initiative, and in the White House as Deputy Director of the Presidential Personnel Office and as Assistant Counsel in the Office of Counsel to the President.

He is a graduate of Georgetown University and the Georgetown University Law Center.

The rules require that all nominees be sworn in connection with their testimony. Would you please rise and raise your right hand.

[Whereupon, J. Michael Farrell was duly sworn by the chairman.]

The CHAIRMAN. As you are aware, we have four standard questions that we ask every witness.

Will you be available to appear before this committee and other congressional committees to represent departmental positions and respond to issues of concern to the Congress?

Mr. FARRELL. I will.

The CHAIRMAN. Your informational statement has been submitted to the committee. It is required that this statement be made public unless the committee decides that special circumstances justify an exception.

Do you have any objection to the publication of your informational statement?

Mr. FARRELL. I have no objection.

The CHAIRMAN. Are you aware of any personal holdings, investments, or interests that could constitute a conflict of interest or create the appearance of such a conflict should you be confirmed and assume the office to which you have been nominated by the President?

Mr. FARRELL. My investments, personal holdings, and other interests have been reviewed by myself and the appropriate ethics counselors within the Federal Government. I have taken appropriate action to avoid any conflicts of interest. There are no conflicts of interest, or appearances thereof, to my knowledge.

The CHAIRMAN. Are you involved in, or do you have any interest in blind trusts?

Mr. FARRELL. I have none.

The CHAIRMAN. You may proceed with your statement in full or in summary, however you would prefer.

STATEMENT OF J. MICHAEL FARRELL, NOMINEE TO BE GENERAL COUNSEL, DEPARTMENT OF ENERGY

Mr. FARRELL. Thank you very much, Mr. Chairman. It is a privilege to appear before the committee as President Reagan's nominee for the General Counsel of the Department of Energy.

I am proud of the introduction given to me by a Senator who I have respected throughout his political career.

Mr. Chairman, you have a statement which has been circulated to the committee and I will not take the time this morning to read it. I request that it be made part of the record.

The CHAIRMAN. It will be made a part of the record, in full.

Mr. FARRELL. Mr. Chairman, I have just two points I'd like to make at this time. First, I've been a lawyer for 19 years and have represented many clients. If I am confirmed, my new clients will be Secretary Herrington and the senior Department officials. My guiding principle as a lawyer, whether I advise the Secretary or one of

the Assistant Secretaries, is that I'll give my best advice based upon an objective reading of the law, not what I wish it to be.

And, second, I would like to state, Mr. Chairman, that if confirmed, I will be accountable to this committee, Congress, and the American people. I am sensitive to the importance of congressional oversight, and I will look forward to working with the Congress on important energy issues.

If there are any questions, Mr. Chairman, I'd be happy to answer them at this time.

[The prepared statement of Mr. Farrell follows:]

Statement of J. Michael Farrell

before the Committee on Energy and Natural Resources

Mr. Chairman and members of the Committee, thank you for giving me the privilege of appearing before you as the President's nominee for General Counsel of the Department of Energy. The office of a departmental general counsel is one of the highest positions to which an attorney can aspire, and it is a great honor to be here.

I have been a lawyer for 19 years, graduating from the Georgetown Law Center in 1966 after receiving a degree from the Georgetown University School of Business Administration in 1963. During my professional career, I acquired broad experience in many areas of the law. I have worked as a government attorney; engaged in the practice of administrative law before numerous Federal and local agencies; and, represented clients in litigation before local, State, and Federal courts at trial and appellate levels. In addition, I have been an adjunct professor of law at the Georgetown University Law Center. I believe the cumulative effect of these past professional activities is to give me the necessary background experience, skills, and qualifications to serve as General Counsel of the Department of Energy.

My experience working for the Federal government began immediately after law school, when I accepted an appointment as Assistant Counsel in the Office of General Counsel at the Federal Home Loan Bank Board. In that position, I was responsible for developing and drafting legislation as well as enforcing the Board's rules and regulations.

In January 1981, I was requested to serve at the White House in the Office of Counsel to the President. I later became Deputy Director of the White House Office of Presidential Personnel, assisting in the coordination and implementation of the Administration's programs.

In June 1982, I was appointed to the State Department in the Inter-American Affairs Bureau, helping secure approval of the Caribbean Basin Initiative. I coordinated the efforts of the Departments of State, Treasury, Commerce, Agriculture and Labor, the Office of the U.S Trade Representative, the White House, the Export-Import Bank, and the Overseas Private Investment Corporation. I also had to reconcile the interests of the potential beneficiary nations as well as such private sector organizations as the U.S. Chamber of Commerce, the Chambers of Commerce of numerous U.S. cities and foreign nations, private volunteer organizations, and U.S. and foreign corporations.

As an attorney in the private sector I represented clients who had to respond to and comply with the rules and regulations of Federal governmental agencies. This has given me excellent experience in Federal enforcement and litigation activities.

In addition to a wide range of experience dealing with Federal activities, both inside and outside the government, I bring to this position a background in managing and directing lawyers. I believe a general counsel's most important responsibility is to provide direction and guidance to his staff. At the Department of Energy now, the General Counsel's staff is professional and competent. They performed superbly under the leadership of

my predecessor Ted Garrish. If I am confirmed, it will be my job to ensure that they reach their full potential and continue to do their fine work.

As I view it, the General Counsel's office is like a law firm with one client: in this case, the Secretary of Energy. I come to this job with no preconceived notions, therefore, I will be able to offer Secretary Herrington a fresh perspective on the numerous questions that arise with respect to energy issues. I have no longstanding personal prejudices to cloud my judgement. Like any competent lawyer , my advice will be based upon my best reading of the law.

My ultimate responsibility, of course, will be to the American people; as a result, I take the oath of office that is associated with this appointment very seriously. The interests of the taxpayers, the consumers, the producers, the utilities and the public interest groups all deserve a fair hearing; as the chief legal advisor to the Secretary of Energy, I will assure you that the competing interests will receive appropriate review.

If confirmed, I will be fair in my dealings with Congress and with the general public. I will be as responsive as possible, Mr. Chairman, to your needs and the needs of this Committee. I hope that after a very short while, we will have developed an excellent working relationship.

Virtually every decision made at the Department of Energy first passes through the General Counsel's office for comment or advice. Therefore, I think it is important that the General Counsel share the same basic policy objectives as the President and the Energy Secretary. Even with the

accomplishments and successes of the first four years, the Department will be developing many new initiatives during the next few years. I expect to be supporting the Administration in these initiatives by making sure that they meet the appropriate Constitutional and statutory tests.

Mr. Chairman, serving President Reagan has been and will continue to be one of the greatest honors of my life. I look forward to working with Secretary Herrington; I know he will distinguish himself as a superb Cabinet officer. If you have any questions, I will be happy to answer them at this time.

Thank you.

The CHAIRMAN. Thank you, Mr. Farrell.

I recognize that an attorney has an attorney-client relationship and a duty to advise.

Do you approach that from the standpoint of telling your clients what they cannot do, or from the standpoint of trying to find a way to do what they wish to do?

Mr. FARRELL. Mr. Chairman, I have always taken the position that I try to be a facilitator; tell what my clients can do, more of a positive attorney than the negative.

But in the Government service and in the private sector, there are times when you must tell your client there's just something they cannot do.

The CHAIRMAN. Well, I assume that that's true, and I'm not going to get personal about whether or not you're going to have that problem of having a client and having to tell him he can't do what he wants to do.

I just said that so Senator Ford wouldn't.

Senator Ford: Wouldn't what?

The CHAIRMAN. I practiced law also before I got involved in politics and ruined my perspectives about the law. You also said you would approach it from the standpoint of what the law is, not what it ought to be. I found that to be a very great difficulty for me in the practice of law, once I got into the State legislature. Then I was arguing with the judges what I thought the law ought to be, and they were singularly unimpressed.

You have kind of a dual role here, it seems to me, in advising administrators of the law, but also people who develop policy. I know in my practice of law, I used to get terribly frustrated with my colleagues who were city attorneys, as I was for a period of years. I was also in the Association of City Attorneys. I noticed that a great many of them could always find a reason why their mayor and council couldn't do something, while some few would

find a way to advise their clients as to what the alternatives were and allow their clients to make the choices.

Which is your approach? To try to guide them by your advice, or to give them advice and allow them to make choices?

Mr. FARRELL. I guess I have a little of both. I want to guide my clients, and I also want to give them the options. I am not the decisionmaking person at the Department; the Secretary is.

The CHAIRMAN. But you do have opinions?

Mr. FARRELL. Absolutely.

The CHAIRMAN. Thank you very much for a very honest answer. I appreciate it.

Senator Ford.

Senator FORD. If you give your client information he cannot do that, and he still goes ahead and does it, do you stay with him as his lawyer?

Mr. FARRELL. Well, in the situation at the Department of Energy, I will be giving counsel on the applicability of the laws and the regulations. I do not foresee the Secretary or any one of the Assistant Secretaries going against the law.

Senator FORD. Well, I'm not saying against the law. You've given him advice not to do it maybe. But I always heard a lawyer, when you ask him which way you ought to go, would say go either way you want to and we'll make a good case.

The CHAIRMAN. And you had one.

Senator FORD. That's right; I had one. Mr. Farrell, on page—if it wasn't for me around this committee, we wouldn't have any fun at all. [Laughter.]

The CHAIRMAN. I'm not sure whether we'd have any, but we wouldn't have as much.

Senator FORD. Oh, me. One day we'll be in the majority. [Laughter.]

I just said one day now, Mr. Chairman; I didn't say when. Because I like throwing grenades; it's easier than catching them.

Mr. Farrell, on page 2 of your testimony, you state that—and I quote: "I believe a general counsel's most important responsibility is to provide direction and guidance to his staff."

What other specific assignments have been given to you?

Mr. FARRELL. At the Department of Energy, or——

Senator FORD. That's exactly what—that's where you're going, isn't it?

Mr. FARRELL. Correct, Senator. I have a staff that is divided into four sections. My position as it relates to them will be manage them, bring the opinions forward as requested, be timely in responding to the litigation——

Senator FORD. That's your directions to the staff.

Mr. FARRELL. Correct.

Senator FORD. What specific assignments have been given to you?

Mr. FARRELL. None at this time.

Senator FORD. None. So you don't know what you're going to do, other than what your assignment is and what information you've given to the staff?

Mr. FARRELL. Correct.

Senator FORD. So you wouldn't have any idea as to whether your operation or your posture is going to be the same as your predecessor's or not.

Mr. FARRELL. Correct.

Senator FORD. So you're kind of in limbo then. You're just going over as counsel and haven't had an opportunity to discuss it.

Are you acting counsel now?

Mr. FARRELL. No, I am not.

Senator FORD. And so you haven't had a chance to talk with the Secretary as it relates to what he expects of you if you come on as counsel?

Mr. FARRELL. Well, yes, I've had that. I will act as his, quote, counsel to him, counsel to the Assistant Secretaries, and I don't envision acting any radically different than my predecessor, Mr. Garrish.

Senator FORD. All right.

But then to whom do you report?

Mr. FARRELL. To the Secretary.

Senator FORD. To the Secretary.

On page 4, you say that you expect to support many new initiatives—I believe that's right, I think I'm correct in that—that the DOE will be developing during the next few years.

What are those developing initiatives?

Mr. FARRELL. One initiative that has been discussed is the nuclear licensing legislation that will be coming before the Congress; that is, the one stop, very simplified one-stop licensing procedure. That is, in the event that a reactor can be approved and the builder, the utility, whoever, will be able to come before the Government and get his construction permit, his operating permit, I believe in the nuclear option.

Senator FORD. Any conversation, any direction in new initiatives as it relates to coal?

Mr. FARRELL. Well, as was previously stated, May 1, a report on the clean coal technologies will be coming forward. That is in the preliminary stage. I definitely support the use of coal as one of our major resources. It is our major resource in this country.

Senator FORD. It is our major resource in this country?

Mr. FARRELL. As I understand it, we have approximately a 300-year supply in the ground. Getting it out of the ground is what——

Senator FORD. After that statement with me, Mr. Farrell, you might as well just stop.

I thank the chairman. Thank you, Mr. Farrell.

The CHAIRMAN. Senator Warner.

Senator WARNER. Thank you, Mr. Chairman.

Mr. Farrell, both Mr. Ford and I are on the record for our constituencies. I got there first, but Mr. Ford came in right behind and he perfected his record.

Senator FORD. I've always followed you, John, wherever you've led me.

Senator WARNER. Make that note, Mr. Chairman.

Senator FORD. Up till now.

Senator WARNER. Let me explore with you a little bit. I listened very carefully when you made your opening remarks about your approach to your position.

I was privileged once to be a Secretary of a large Government department and had a series of general counsels over the period of 5 years I was there. And in my discussions with them, I always said that you're the lawyer for the Department; you are a public servant on the payroll paid by the Federal taxes, and as such, your first duty was to the Department as a whole and, second, to the Secretary and the other executives.

Do we have a difference of approach here?

Mr. FARRELL. No, Senator, we don't. In making my recommendations, I will take into consideration the taxpayers, the utility, special interest groups, the American consumers. All of those will go into my recommendations—and the law—the relationships between all four, or five.

Senator WARNER. Try this from a different tangent, and indeed this is nothing personal toward you or the Presidential appointees in this Department, but there is a history in this town of Presidential appointees going astray of the law in the best interests of their Departments. And that won't happen under the leadership of the able Secretary Herrington, yourself, and others.

But, hypothetically, there could come a time when in the interest of the United States and the Department of Energy, you would have to take a strong stance in opposition with a Presidential appointee. That could happen.

Mr. FARRELL. Certainly. That is in my oath.

Senator WARNER. And therefore, you would put the interests of the U.S. Government, and specifically your Department, ahead of the interests of that Presidential appointee?

Mr. FARRELL. Correct, Senator.

Senator WARNER. That's clear.

Thank you, Mr. CHAIRMAN.

The CHAIRMAN. Thank you.

Senator Evans.

Senator EVANS. Thank you, Mr. Chairman.

It may be a little early, since you are just about to come aboard, but to the degree you're familiar with the Coastal Zone Management Act which gives the consent of Congress to the formation of interstate compact agencies for the purpose of developing their own coastal zone management plans then further requires that Federal activities be consistent with these plans.

Do you believe that that is a constitutional act which has been passed and which is now under existence, the requirement that Federal actions be consistent with those plans, even though they're developed by a collection of States or individual States as interstate compacts?

Mr. FARRELL. Senator, as I understand it, that particular point is under litigation right now. I think it's a little inappropriate——

Senator EVANS. The Coastal Zone Management Act, I don't believe is under litigation, is it?

Mr. FARRELL. No, but I think there is a case that directly relates to it.

Senator EVANS. There is, a somewhat similar case, but I don't think this is under litigation. I'm talking about the basic concept of the ability of the Federal Government to give authority for States to enter into interstate compacts and require that subsequent Fed-

eral actions be limited to some degree or consistent with the plans that are developed.

Mr. FARRELL. Well, Senator, I must admit I have not really reviewed the statute adequately to give you a yes or no answer at this time. I would be glad to review it in the future and discuss it with you.

Senator EVANS. Could you do that and submit at least your approach as to the constitutionality and the validity of the Coastal Zone Management Act which has those requirements in it.

I won't even bother to ask you about the case you know I'm getting at. But there is a consistency, at least I hope there's a consistency, and if there isn't, we're in big trouble with a lot of other acts that have already been passed.

If you could do that, then it would be helpful.

Mr. FARRELL. I'll do that, Senator.

Senator EVANS. OK.

Thank you, Mr. Chairman.

[The information follows:]

QUESTIONS FROM SENATOR EVANS

Question: The Coastal Zone Management Act gives the consent of Congress to the formation of interstate compact agencies for the purpose of developing coastal zone management plans. The Coastal Zone Management Act requires federal activities be consistent with those plans. Likewise, proposed legislation consenting to interstate compacts for the disposal of low-level radioactive waste would consent to the formation of interstate compact agencies and requires federal consistency with their disposal plans. Please compare and contrast these legislative schemes with that set out in the Northwest Power Act.

Answer: My understanding of the Coastal Zone Management Act (CZMA) is that it encourages coastal states to exercise their police powers to regulate land use and certain marine activities in the coastal zone. That statute requires determination whether federal activities in the zone are consistent with such state regulation. Constraints on federal activities would appear to result from the CZMA's waiver of sovereign immunity from state regulation that otherwise would exist under the Supremacy Clause.

I am advised that the pending bills that would consent to interstate compacts for disposal of low-level radioactive waste are directed to authorizing the compacts themselves (which is

required by the Constitution) and the restrictions of regional disposal facilities to waste generated within the region.

The Northwest Power Act does provide the required consent of Congress for establishment of the Northwest Power Council. In contrast to the CZMA, the statutory scheme of the Northwest Power Act appears to have the Council derive all of its authority from the federal statute, rather than from each State's exercise of its police power. If the exclusive source of the Council's authority is federal law, then the question that may occur is whether this authority is the type that may be wielded only by individuals appointed pursuant to the Appointments Clause of the Constitution.

The CHAIRMAN. Thank you.

Senator Hecht.

Senator HECHT. Thank you, Mr. Chairman.

No questions, except to point out that I'm very impressed with the applicant's background and qualifications, and I think he will do an excellent job.

Mr. FARRELL. Thank you, Senator.

The CHAIRMAN. Thank you very much. I have no further questions at this time. I wish you well, and I expect that we'll have no difficulty.

Thank you very much for being here today.

Mr. FARRELL. Thank you very much, Mr. Chairman.

The CHAIRMAN. Our next witness is Theodore J. Garrish, nominated to be Assistant Secretary for Congressional, Intergovernmental, and Public Affairs.

As Assistant Secretary, Mr. Garrish would be responsible for developing, managing, and coordinating relations between the Department of Energy and Congress, the news media, State and local governmental officials, other Federal agencies and consumer and citizen organizations.

Mr. Garrish's professional background includes extensive experience in Government service as well as several years in private law practice. Most recently, Mr. Garrish has served as General Counsel at the Department of Energy. Prior to that he was special assistant to the Secretary at DOE. He has served at the Department of the Interior in several positions, and he has also worked at the U.S. Consumer Product Safety Commission, the U.S. Office of Consumer Affairs, the White House, the Federal Trade Commission, and the Department of Justice.

Senator Trible had wished to be here to introduce you to the committee, along with the senior Senator from Virginia, Senator Warner. He has asked that his statement be placed in the record. And, without objection, it will be placed in the record immediately following the remarks of Senator Warner earlier.

Without objection, it is so ordered.

Before proceeding to your statement, the rules do require that you be sworn. Will you please rise and raise your right hand?

[Whereupon, Theodore J. Garrish was duly sworn by the chairman.]

The CHAIRMAN. Before you begin your statement, you are familiar with our process here that requires asking four standard questions.

Will you be available to appear before this committee and other congressional committees to represent departmental positions and respond to issues of concern to the Congress?

Mr. GARRISH. I will.

The CHAIRMAN. Your informational statement has been submitted to the committee. However, it is required that this statement be made public unless the committee decides that special circumstances justify an exception.

Do you have any objection to the publication of your informational statement?

Mr. GARRISH. I have no objection.

The CHAIRMAN. Are you aware of any personal holdings, investments, or interests that could constitute a conflict of interest or create the appearance of such a conflict should you be confirmed and assume the office to which you have been nominated by the President?

Mr. GARRISH. My investments, personal holdings, and other interests have been reviewed by the appropriate ethics counselors within the Department and the Government, and I have taken action to see that there are no conflicts of interest, and I believe there are no conflicts or appearances thereof, to my knowledge.

The CHAIRMAN. Are you involved in, or do you have any assets held in blind trust?

Mr. GARRISH. No, I do not.

The CHAIRMAN. Mr. Garrish, you may deliver your statement, or if you desire, your prepared statement will be placed in the record in full and you may summarize, whichever way you'd prefer.

STATEMENT OF THEODORE J. GARRISH, NOMINEE TO BE ASSISTANT SECRETARY FOR CONGRESSIONAL, INTERGOVERNMENTAL AND PUBLIC AFFAIRS, DEPARTMENT OF ENERGY

Mr. GARRISH. Thank you very much, Mr. Chairman and members of the committee. It's a pleasure and great honor to be here this morning on my nomination, and I have special thanks to Senator Warner and Senator Trible for their kind introductions.

I would like to have my formal statement introduced into the record.

The CHAIRMAN. It will be placed in the record in full.

Mr. GARRISH. As you know, I have had the opportunity to work with the committee over the years, so I will not take any additional time today to review my background. I think many of you are already familiar with me. However, there are a couple of points which I would like to cover that are included in my statement.

I would like to commit to the committee that there are three points that I find extremely important for the position that I'm about to enter. First is to be responsive to the Congress, to provide the kinds of information for requests for information or responsive to the needs of your constituents. I believe that the Assistant Secretary for Congressional Affairs has a special responsibility to the Congress, and I intend to be faithful to that responsibility.

Second, I believe that good communication is essential. You need to know what is happening at the Department as it affects your States and your interests, and I will see to it that we have the kind of communication which will allow you to know exactly what's happening at the Department of Energy.

And then finally, I believe that we should provide assistance to you during your legislative activities. We will give you the kind of information on energy matters that you require, provide the witnesses that you need during hearings, drafting services as needed, and to be generally helpful to the Congress in pursuit of their legislative activities.

With those points, I would like to respond to your questions.

[The prepared statement of Mr. Garrish follows:]

Statement of

Theodore J. Garrish

Before the

Committee on Energy and Natural Resources

United States Senate

April 26, 1985

Mr. Chairman and Members of the Committee, I appreciate this opportunity to appear before you as the President's nominee for Assistant Secretary of Energy for Congressional, Intergovernmental, and Public Affairs. This is a great honor, and if confirmed, I will do my best to live up to the high standards expected of those who are entrusted with public office.

Background and Qualifications

I think most of you already know me. Two years ago you confirmed me as General Counsel to the Department of Energy after examining my background and qualifications. Since then, we have worked together on a variety of energy issues; I have done my best to maintain a close relationship with both houses of Congress in all the legislative matters with which I have been associated.

I bring to the office of Congressional, Intergovernmental, and Public Affairs significant legislative experience as well as a strong background in energy issues.

During the period when I was a private attorney, I was active in legislative advocacy in the field of natural resources. Later I supervised the office of legislation at

the Department of the Interior and had the opportunity to work with this committee and other committees in both Houses. But perhaps my most valuable legislative experience came during my two years as General Counsel for the Department of Energy. As you know, the General Counsel's office is responsible for drafting all proposed legislation as well as advising the Secretary on many issues that deal with Congress.

My experience with energy began at the Interior Department in 1974 when I was involved in in such issues as Outer Continental Shelf matters, coal, oil shale, and leasing of public lands. And, of course, as General Counsel for the Energy Department and in my capacity as Acting Assistant Secretary, I have been and continue to be involved in virtually every issue confronting the Energy Department.

I believe that this experience has prepared me for this new position. There is important work to be done at the Department of Energy. I look forward to continuing my service to the President and assisting with the important objectives of the Department.

Professional Objectives

If I am confirmed, I intend to continue the tradition of professionalism that has been a feature of the congressional, intergovernmental, and public affairs office. The office has always been well-managed and smooth-running and I hope to achieve the same results.

There are several important aspects to this job. I'd like to discuss three of them at this time:

Responsiveness: I believe that the key to a good relationship between the Congress and the office of Congressional affairs is responsiveness. I promise you that, if I am confirmed, my office will work diligently to answer your requests. If you need information on a particular energy issue, we will work with you to get a response as rapidly as possible. If you need assistance on an energy program that is affecting your constituents, we will act quickly to help you solve the problem. Let me add parenthetically that when I took over as Acting Assistant Secretary, the Department faced a substantial backlog of unanswered letters from members of Congress. That backlog has now been virtually eliminated. It is my policy that every request from Capitol Hill gets a prompt and responsive answer.

Communications: Without good communications between Congress and the Administration, none of us would be able to complete the important work facing us. I commit to you, Mr. Chairman, that if confirmed, I will do everything within my power to keep the Congress informed of whatever we are doing at the Department of Energy. As I see it, this involves full and open consultations on a regular basis.

Legislative Assistance: As the Department's former General Counsel, I know that the Congressional Affairs office has a great potential to assist members of Congress as they work through their legislative agenda. If confirmed, I and my office will do what we can to assist the Congress on legislative matters. We will be happy to help committees and individual members obtain the information needed to draft legislation, we will provide the necessary departmental witnesses, and assist in the drafting of appropriate provisions during the committee process. This is an important area on which I intend to place particular emphasis.

Philosophical Approach

If confirmed, I will, to the best of my abilities, carry out the policies established by President Reagan and

Secretary Herrington. The Administration has made great progress during the past four years by helping make energy sources more competitive in the marketplace. By continuing these successful policies, I believe America can become even more energy secure.

Like the President and Secretary Herrington, I believe the best path to energy security is through minimized Federal intervention in energy markets. I believe we need to continue our efforts to eliminate the disincentives to the marketplace and to work toward creating a balanced and mixed energy base. These are each important goals that continue to require our attention.

It has been a great honor to serve President Reagan during the past four years. I look forward to working more closely with Congress while we continue developing an energy program that keeps America strong and secure. If you have any questions, I shall be happy to answer them.

Thank you.

The CHAIRMAN. Thank you very much, Mr. Garrish.

You're no stranger around these Halls. You're no stranger in this committee room. You're no stranger to the issues that will continue to come before the Department of Energy over the next few years.

Because you have been here so often and because we know you so well, I have no particular questions at this time.

Mr. GARRISH. I appreciate that, Mr. Chairman.

The CHAIRMAN. Senator Ford.

Senator FORD. I'm almost in the same position at the chairman, Mr. Garrish, and I'm pleased to see you again. I was impressed personally with your performance as General Counsel, although we did have some major differences as I recall, as it relates to natural gas.

But I hope you bring the same talents to your next position.

I might say, Mr. Chairman, I've been very satisfied with the cooperation shown my office by the Department of Energy Congressional Affairs.

In that vein, do you anticipate any changes or new emphasis in the operation of congressional affairs?

Mr. GARRISH. I have no current plans for changes. I've been in the job in an acting capacity for a little over a month and a half. I would like to have the opportunity to really see how the office works first before we make changes.

Thus far, I've been impressed with the caliber of the people in the congressional office, and I have no current plans to make any changes. I'll be discussing these matters with the Secretary, but I have no current plans to make changes now.

Senator FORD. In reading your testimony, I note that you do not mention intergovernmental affairs. The emphasis is on congressional affairs.

If the present office, in my opinion, has a weakness, it is in dealing with the States. Do you have any plans in that particular area?

Mr. GARRISH. Well, I agree with you. Unfortunately, I will, if confirmed, have one of the longest titles in the Government, and we also refer to it simply as congressional. But the office does have other elements that are extremely important to the operation of the Department.

Obviously, intergovernmental relations is an important part of our work. We have a lot of programs that are very important to the States; for instance, some of our nuclear waste activities. And I would intend to do what we can to assure that the States have exactly the same kind of cooperation as we will provide to the Congress.

To the extent that I determine that there is additional work or personnel that are required, I can assure you that I will see to it that we request whatever resouces are necessary to carry out those responsibilities.

Senator FORD. I thank you very much, sir. And thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Senator Warner.

Senator WARNER. Mr. Chairman, I share the views expressed by yourself and our distinguished colleague from Kentucky that this fine nominee has served his country well, and based on the record

of that service I have no further questions and I anticipate the nomination will move smoothly.

The CHAIRMAN. Thank you.

Senator Evans.

Senator EVANS. Mr. Garrish, you'd be disappointed if I didn't repeat the question I had for Mr. Farrell.

What is your opinion on the validity of the Coastal Zone Management Act and its requirements?

Mr. GARRISH. As far as the Coastal Zone Management Act is concerned, I have not personally evaluated it with reference to the case I believe you're referring to, involving the Northwest Planning Council. That is an extremely complex area, but we have had considerable discussions with the Department of Justice with regard to the legality of these sorts of entities, and I could not really provide to you today an opinion with regard to that act.

I have principally been involved, as you know, with the Northwest Planning Council and their activities. I have sent a couple of letters to the Department of Justice on that issue, and I'll be happy to address those if you'd like.

Senator EVANS. Do I understand correctly that the fundamental view is that no act that Congress passes can, under any circumstances, limit the actions of Federal agencies by any State or collection of States?

Mr. GARRISH. No; I don't believe that would be a fair statement of what my belief is. I think that each of these has to be carefully evaluated on the facts. The one case that was presented to us related to the Northwest Planning Council. We tried to look at the facts in that particular case and only deal with the issues that were raised in the lawsuit.

As far as I know, the Government has not—the Justice Department does not now have a position with regard to the larger question. Now, I may be mistaken but I'm not aware of any.

Senator EVANS. When you stated in your letter to Rex Lee that any finding which subordinates BPA to the will of the council is both constitutionally and practically intolerable, was that related to the narrow facts or the particulars? When you said "any finding," did you mean any finding?

Mr. GARRISH. Well, I believe in the context of the *Master Builders* case, the question was whether or not the Northwest Planning Council was in an advisory role. And I believe that our recommendations to the Justice Department dealt mainly with that point. So that as far as the issues that were presented in that case were concerned, we did not believe that there was a kind of issue that could be termed the exercise of substantial Federal action which would invalidate the council.

As I recall, we did not get into some of the other powers of the council. Those issues were not addressed. We principally tried to deal with the case in the way it was presented.

Senator EVANS. Thank you, Mr. Chairman.

The CHAIRMAN. I thank you, Mr. Garrish.

Senator Hecht.

[Senator Hecht nods negatively.]

The CHAIRMAN. Senator Ford.

Senator Ford. Mr. Chairman, Senator Evans is getting to a point and I'm not sure that I'm absolutely correct, Dan, but isn't there litigation underway now as it relates to interstate agreements on multistate banking or interstate compacts as it relates to banking, but that might have an effect on what Senator Evans is worried about here?

Senator EVANS. I don't know; there's a much more specific case that relates to our Pacific Northwest BPA and the Northwest Power Planning Council.

Senator FORD. But this could have, under the interstate banking——

The CHAIRMAN. If I might interject here——

Senator FORD. Sure. I'm just trying to throw something up here, that this has been bouncing back and forth here this morning.

The CHAIRMAN. Well, there has been some argument raised on behalf of the Northwest Council that it is in the nature of an interstate compact. I don't think they have pushed that argument very strongly.

So the question is a narrower question, not of what is the relationship between the Federal and compact agency; the question is what is the authority granted to the agency under the Northwest Power Act?

Mr. GARRISH. That is my understanding. And in fact, there are other cases relating to interstate compacts that I know the Justice Department has been dealing with. But this particular case had not been argued in the sense of an interstate compact.

Senator FORD. It could have some reflection if you're getting ready to refer to——

The CHAIRMAN. If indeed it were a compact and it were argued on that basis, then you would get into that directly. But it has not been argued on that basis, at least seriously, and is not argued on that basis before the courts.

Therefore, it's a narrower question, not a compact relationship, but a statutory authority.

Mr. GARRISH. That is my understanding.

The CHAIRMAN. Any further questions?

Again, thank you very much for your appearance and testimony here, and I would express the same belief that has been expressed by others, that there should be no difficulty at all in the confirmation.

Thank you.

Our final witness is Helmut A. Merklein, who has been nominated to be Administrator of the Energy Information Administration. The Energy Information Administration is an independent organization created to maintain a comprehensive energy information system.

Its activities include preparation of a large number of energy data publications, analysis of various energy issues, forecasting of future energy trends, and providing basic data support for the various DOE programs.

Dr. Merklein received a recess appointment on December 31, 1984, and has been serving as Administrator of the Energy Information Administration since that time. Before that, he was Assist-

ant Secretary for International Affairs and Energy Emergencies at DOE.

Dr. Merklein is a former engineer, economist, and educator who holds an MBA degree and a Ph.D. in economics. He has served as dean of the Graduate School of Management at the University of Dallas and as a full professor in the Department of Petroleum Engineering at Texas A&M University. Dr. Merklein has also worked for an international energy consulting firm and for a large U.S. oil company as a petroleum engineer.

During the course of his career, Dr. Merklein has authored and coauthored several books and numerous articles on international finance and energy economics.

Before proceeding to your statement, as you know, Dr. Merklein, it is required that the witnesses for confirmation before this committee be sworn, so if you would rise and raise your right hand.

[Whereupon, Helmut A. Merklein was duly sworn by the chairman.]

The CHAIRMAN. I'd like to ask the standard four questions of you.

Will you be available to appear before this committee and other congressional committees to represent departmental positions and respond to issues of concern to the Congress?

Dr. MERKLEIN. I will.

The CHAIRMAN. Your informational statement has been submitted to the committee. However, it is required that this statement be made public unless the committee decides that special circumstances justify an exception.

Do you have any objection to the publication of your informational statement?

Dr. MERKLEIN. I have no objection.

The CHAIRMAN. Are you aware of any personal holdings, investments, or interests that could constitute a conflict of interest or create the appearance of such a conflict should you be confirmed and assume the office to which you've been nominated by the President?

Dr. MERKLEIN. Mr. Chairman, my investments, personal holdings, and other interests have been reviewed by myself and by appropriate authorities at the Department of Energy. I've taken action ensuring that there are no conflicts of interest.

The CHAIRMAN. Are you involved or do you have any assets held in blind trusts?

Dr. MERKLEIN. I have no blind trusts.

The CHAIRMAN. You may proceed to read your statement or summarize it. We'll place your statement in the record if you wish to summarize.

Dr. MERKLEIN. I think I prefer to briefly summarize my statement and have the statement in its entirety——

The CHAIRMAN. The full statement will be placed in the record.

You may proceed.

STATEMENT OF DR. HELMUT A. MERKLEIN, NOMINEE TO BE ADMINISTRATOR, ENERGY INFORMATION ADMINISTRATION, DEPARTMENT OF ENERGY

Dr. MERKLEIN. Mr. Chairman, members of this committee, I am honored to be here today as President Reagan's nominee for the position of Administrator of the Energy Information Administration, Department of Energy.

I hold a bachelor of science degree in petroleum engineering from the University of Oklahoma; an MBA, master of business administration, from the University of Dallas; a Ph.D. in economics from Texas A&M University, as has been pointed out before.

I have about 10 years of experience in petroleum production and drilling. I worked for Getty Oil Co., which now has become part of Texaco, and Core Laboratories, one of the major international reservoir engineering consulting firms.

Upon receipt of my Ph.D. in 1970, I turned to academia where I taught for 13 years, first in the Graduate School of Management, University of Dallas, and later at Texas A&M at the School of Petroleum Engineering.

The last year, I served in the capacity of Assistant Secretary of International Affairs, which position was subsequently enlarged to also include energy emergencies.

Turning to my current position, the function of the Energy Information Administration is to collect, assemble, and hold a central and unified data and information program. I have worked in that position on a recess appointment since December 31, 1984, and I am pleased to tell you that I find the organization extremely well organized. I plan no major changes, and I want to assure you that in particular I do not plan any changes in personnel for my office directors.

The one issue that I am sure will come up and will be of concern to you is the independence of the Energy Information Administration. I pledge to you that I will uphold that independence, that the data we collect will not be biased politically or any other way; and that I will maintain the integrity of the system that, with your confirmation, I would be in charge of, as it has been maintained by my two predecessors.

Thank you very much.

[The prepared statement of Dr. Merklein follows:]

STATEMENT OF

HELMUT A. MERKLEIN

NOMINEE FOR THE POSITION OF

ADMINISTRATOR OF THE ENERGY INFORMATION ADMINISTRATION

OF THE DEPARTMENT OF ENERGY

BEFORE THE SENATE COMMITTEE

ON ENERGY AND NATURAL RESOURCES

APRIL 26, 1985

Mr. Chairman and distinguished Members of the Committee, I appreciate the opportunity to appear before you today as President Reagan's nominee for the position of Administrator of the Energy Information Administration, U.S. Department of Energy.

PERSONAL BACKGROUND

My educational background and professional experience are mainly in the fields of petroleum engineering, business administration, economics, and college teaching. I earned a Bachelor of Science degree in petroleum engineering from the University of Oklahoma in 1959, and obtained an MBA in 1968 through evening courses at the University of Dallas. A National Science Foundation Fellowship allowed me to return to college after 10 years of work as a petroleum engineer. I used the opportunity to acquire a Ph.D. degree in economics from Texas A&M University in 1970.

My experience in the energy industry from 1959 through 1969 includes six years with Getty Oil Company, now Texaco, first as a field engineer in drilling and production, and later as a staff engineer with primary responsibility for evaluating oil and gas reserves. Following this, I joined Core Laboratories, Inc., one of this country's largest and most respected international petroleum consulting firms. My three years with Core Laboratories were devoted to petroleum engineering consulting, mainly in the area of reservoir engineering.

Upon completion of my Ph.D. in economics in 1970, I entered the world of academia, starting at the University of Dallas. After ten years of teaching graduate courses of economics and finance, I became the Dean of that University's Graduate School of Management in 1980. In 1982, I left the University of Dallas to accept a full professorship in the Department of Petroleum Engineering at Texas A&M University. During my 13 years in academia, I authored three books and more than 100 articles, principally on energy economics and international finance.

Late in 1983, I was nominated by President Reagan and confirmed by this Committee as Assistant Secretary for International Affairs, U.S. Department of Energy. During my service in that position the responsibilities of that Office were enlarged to include Energy Emergencies. Since December 31, 1984, I have been serving as the Administrator of the Energy Information Administration (EIA) under a recess appointment.

ROLE OF THE ENERGY INFORMATION ADMINISTRATION

The mission of the Energy Information Administration is to carry out a central, comprehensive, and unified energy data and information program and to make the products of this program available so that those people in government, industry, and the private sector who make decisions about energy have the information they need to make those decisions well.

My brief association to date with the Energy Information Administration has confirmed my earlier impressions concerning its solid professionalism and analytical competence. I intend to fully utilize the technical personnel now at EIA. Assuming my new position on a recess appointment, I have found EIA to be well structured and organizationally sound; accordingly, I see no need to effect major organizational changes, nor do I plan to replace any of EIA's current line managers.

As mentioned, the objective of the EIA is to provide relevant and timely energy information to decisionmakers, both within and outside the Federal government, and to assist them in making informed decisions. While EIA is an integral part of the Department of Energy, the Congress created it with a considerable measure of autonomy. The EIA is respected by most energy decisionmakers for its intellectual integrity in producing unbiased energy information. I am fully aware of the Congressional mandate for independence and objectivity, and I intend to uphold that mandate.

If confirmed as Administrator, I pledge to work with you, your staffs, other members of the United States Congress, as well as with representatives of the Administration and the public, to provide responsible parties with unbiased energy information.

Mr. Chairman and Members of this Committee, I thank you for the opportunity to come before you today and I am now prepared to answer any question you may have.

The CHAIRMAN. Thank you very much.

Dr. Merklein, as you know, Congress debated for a long while, or perhaps I should put it in a different context—the debates in the Congress over a long period of time often focused on the accuracy of information which we received. The Energy Information Administration is an outgrowth of that congressional concern—that traditional, industry, or commercial sources of information, of which there are many, were not giving us dependable, accurate information.

As a matter of fact, it wasn't very many years ago that we had all kinds of forecasts of tremendous growth of the consumption of energy. Those forecasts proved to be wrong, for a variety of reasons.

Today we have different kinds of forecasts of future trends in energy consumption and demand and price.

Can we have any more confidence in the forecasts that are being made today than the forecasts that were made before that proved to be wrong?

Dr. MERKLEIN. Mr. Chairman, I can sit here and look you in the eye and assure you of my forthcoming independence. I wish I could be equally confident about the forthcoming accuracy of our forecasts. It is in the nature of forecasts that there will be errors. I have reviewed many of the forecasts of EIA and have found them sometimes to be different from what subsequently developed. I am afraid I have to tell you that under my administration, EIA will from time to time be found to be wrong, and I am sure that this will be brought up by various people, including the Secretary and members of your committee.

The CHAIRMAN. Well, I remember a few years ago getting my staff to look at some of the econometric models and their functions. Certainly you cannot make forecasts of energy consumption without looking at the performance of the economy and the components of the economy.

We looked back at quarterly forecasts of three of the best econometric models in the country, and we looked back for 6 years. That would be 24 quarterly forecasts. The only thing those three econometric models had in common was that they were always wrong.

Dr. MERKLEIN. Mr. Chairman, you are going to be wrong by definition. It's not whether you're going to be wrong or right. It's not a yes/no question. It is how close you come to what subsequent events show to be true.

I have been exposed to models for quite some time. I have taken a deep interest in models, including the rather many and elaborate models that we have at EIA; these models all lack one variable or one full component which is the political component.

To give you an example, the rate of interest is not just a matter of monetary policy and demand and supply for credit; it is also a matter of politics, and the political component is generally missing in the models. The models, by definition, are not complete.

I can only assure you that I will review the models or continue to review the models that we have and that I hope that, given the ranges that we will always use in predicting, we will be at least bridging the data as they develop.

The CHAIRMAN. I don't mean to get into that particular subject too deeply, but isn't an econometric model nothing more than an economist's study of history relating certain events that follow one another or precede one another, arranging them in a sequence, and trying to discern from that a correlation of events to subsequent events in the economic field and reducing that to a mathematical formula that can be put into a computer?

Dr. MERKLEIN. Mr. Chairman, I believe that's an accurate description. I might add that one real problem that you would have with models of this type is when you go from one era to another era. And that is precisely what has happened here. We've gone from the low-price energy era to the high-price energy era, and all the historical data that went into the development of the models as we use them today still have elements of the low-price energy era, and that makes them suspect.

The CHAIRMAN. I know to the general public, the term "politician" is usually a belittling term that is intended by most people when they look you in the eye and say you're a politician.

Senator FORD. I always take it by the tone of their voice, though.

The CHAIRMAN. The tone of the voice has something to do with it. I think among politicians, we tend to look at people like you and say you're an economist, which makes you equally suspect.

I guess that's an attempt on our part to spread the guilt.

Dr. MERKLEIN. Mr. Chairman, if it's any comfort to you, as a Presidential appointee, some people would look upon me as a politician. I'm proud to be in good company.

As regards economists, if I may, I want to quote Bernard Shaw, who said that if you take all the economists and lay them end to end, what you reach is no conclusion. [Laughter.]

The CHAIRMAN. I notice you have two arms and it has been suggested that what we need is some one-armed economists so they couldn't say on the one hand this, and on the other hand that.

Dr. MERKLEIN. Mr. Chairman, with all due respect, that's lawyers. [Laughter.]

The CHAIRMAN. Senator Ford.

Senator FORD. Mr. Chairman, after listening to his answers to you, I don't think I'm going to try him.

One thing that disturbed me in your comment, you related to your independence and that you would continue that, and I praise you for that. But then you related to your forecast was about like your independence—didn't come out right. I'm not sure how you said that in exact words, but you alluded to your forecast would be faulty because of certain things and you related that to your independence.

I hope you are not coming away from what I perceived in your initial statement, because you knew you were going to get questions about independence from this panel.

Dr. MERKLEIN. Senator, when I say independence, I mean—I really mean intellectual independence. That is, resistance to systematic political bias. I do not propose to have anything to do with introducing such bias.

Senator FORD. Have you received any instructions or any suggestions as to how your office should operate?

Dr. MERKLEIN. No, sir; if anything, it might have been helpful if I had closer coordination in some ways. I have yet to meet with the Secretary on a one-to-one basis. I understand, of course, he's very busy in getting to know the Department of Energy.

I have worked closely with Deputy Secretary Danny Boggs. We do from time to time sit down with him and go over things that we are doing. For example, he requests and receives a pre-brief short-term economic outlook, our 18-month projection; he wants to know what our views are, and he always very, very carefully stays away from any suggestion that we should perhaps change the data to more nearly reflect the administration line.

I have found an extraordinary sensitivity since I have acted in this position among my Assistant Secretary colleagues, the Deputy Secretary, and the Secretary to suggestions that might be construed as putting pressure on me.

Senator FORD. In your view, should there be any role for officers of the Department outside of EIA, such as the Deputy Secretary, in overseeing or scoping proposed analysis performed by EIA?

Describe this role and why it is justified.

Dr. MERKLEIN. No, there should not be. And there is not going to be. I am not aware that there has been such a role in the past. To give you one example, we submitted at the request of Congressman Dingell a study on the mitigating impacts of different size strategic petroleum reserves, the proverbial 750 million barrels versus 489 million barrels. That study went straight to the Congressman without request for guidance from the Secretary or any other line officers.

We do, however, as a matter of courtesy, give the Secretary an advance copy, 48 hours in advance, before we release it, so that at least he knows how we at EIA communicate with various sources on the Hill.

Senator FORD. Do you anticipate that will be your standard practice?

Dr. MERKLEIN. Yes, sir; I do.

Senator FORD. Just two quick ones, Mr. Chairman. I know you want to move on.

But on April 2, 1981, that you recall just a little bit, you testified before the House Subcommittee on Fossil and Synthetic Fuels on the subject of oil emergency preparedness. At the time, you were the dean of the Graduate School of Management at the University of Dallas.

I would like to ask you now about some of your views which you disclosed then. After explaining to the committee why you were opposed to Government intervention in the market in an oil shortage, you stated to that subcommittee, and I quote: "The collection of information is very expensive. It leads to allocation plans which are obsolete the day they are needed. I would not collect any information. I would not collect any information."

Now, Doctor, you were here before—you are here before the committee, asking us to confirm your nomination as the Administrator of the Energy Information Administration. Are you in effect retracting your earlier statements, and do you believe that we need an Energy Information Administration now, and why?

Dr. MERKLEIN. Well, I'd rather call it elaborate on what I said earlier, if you will bear with me, sir.

Senator FORD. I'll be glad to, because I'd like to get it cleared up.

Dr. MERKLEIN. Yes, sir.

I believe, in anything that we do, there is a hierarchy of needs, and these needs must be met from a limited budget. We cannot or should not collect everything that would be nice to have. We must collect those things that are essential.

I think this hierarchy of needs works over two spectra. The one is the demand versus supply spectrum. I believe that in 1973–74, we had a supply shortage. I think it would be very embarrassing—it would be very embarrassing and untenable for this country not to know what alternative supply sources may be in this country, should we have another shortage.

I would therefore, on my own, stress supply data more heavily than I would demand data, and that is what EIA in fact has done.

Now, beyond that, there is a hierarchy of needs in terms of detail. Clearly, the 1973–74 energy shortage was a national shortage, and if limited funds were available that allowed only a reduced activity, of course national data are the data that I would suggest we should collect first.

Beyond that, you get into regional data where States are lumped together by various pipeline regions or other regions. You get into States. After that, you get into counties, municipalities. You might even get, for example, in the low income home energy assistance heating program, into individual households.

The discussion from which you quoted dealt essentially with demand data. I have still fresh on my mind the very, very detailed demand data that were used to allocate petroleum products. My assertion at the time was that no matter how detailed you are—and I might remind you that my reply was in response to a request for further money to have more detailed demand data available—my argument was that no matter how detailed your demand data are, on the day of a crisis, they become obsolete. That has been alluded to by the chairman because historically the data that you have will cause you to allocate all the gasoline to Aspen and none to Washington, DC. It sounds almost perverse, but it takes a gray or a black market to correct the errors that were introduced by the Government.

That is what I meant at the time. However, I should remind you that in my position as EIA Administrator, I do not, ex officio, have or propose policies of that sort. I mostly operate under mandates, I am fully aware of my congressional mandate and intend to fulfill it.

Senator FORD. Well, it was my understanding, Doctor, that the allocation that was being discussed, or at least what was discussed here—and this was in the House—was not necessarily on historical demand basis, but was based on historical supply figures.

And I'm just going to read one other quote from that same hearing. In that hearing you also said, and I quote: "I note also that most people here felt that in case of a severe shortage of, say, 20 percent, we need voluntary or mandatory allocation programs. I want you to understand"—the committee—"I want you to understand that an oil shortage simply signals underpriced commodity.

It is a question of not having a little less oil at a higher price; it is a question of not having—that is, the question is not that in some areas of the United States people will, and those terms have been used today, frozen to death."

It's a pretty hard statement that you made here. "And the question rather is in the terms of the sacrifice we'll have to bear in case of an emergency, whether people will agree, for example, to live in the wintertime for 90 days in a home where only one room is heated. That is the alternative. To prevent that, we are trying to devise all kinds of allocation plans that will not work." End quote.

Do you recall making that statement?

Dr. MERKLEIN. Yes, sir.

Senator FORD. Do you have any changes in that position today?

Dr. MERKLEIN. I lived through rather harsh times in Germany after World War II. We had severe shortages of all kinds and we managed. So when I spoke about cold rooms in the winter, there was a good deal of personal experience.

Beyond that, the assertion that a shortage of a commodity simply means that the commodity is underpriced——

[Pause.]

Dr. MERKLEIN. Let me hold it just a minute, sir.

Senator FORD. I didn't know whether you were through or you were waiting on me.

Dr. MERKLEIN. The idea that a surplus of a commodity means that it is overpriced is standard economic analysis. I might refer you, for example, to the recent reduction in crude oil prices by OPEC where even that cartel could not resist the market forces in view of the world oil surplus that existed, and it had to adjust downward.

I do not believe that this rather standard economic analysis in any way conflicts with the congressional mandate put upon EIA. I am not asked to pass judgment upon the mandates; I'm asked to use whatever technical information and background I have to see to it that they are executed.

Senator FORD. Well, Doctor, I visited Montana and Idaho and that area out there, and I find that they were living in circumstances not much different than we were, where you burn wood in the day and bank your fire at night with coal. Didn't have any oil; couldn't afford oil. We got by. And I understand those sort of things.

So I think maybe what we were trying to prevent, where those that have would be able to secure it, and those that have not would not be able to. And what we were trying to do was prevent hardship as best we could in some kind of allocation program.

Now, if that doesn't fit an economist's thinking as it relates to compassion, then you and I will have to part company. But I understand where you're coming from, and I understand what you're saying very well, and I hope you understand what I'm saying.

Dr. MERKLEIN. Yes, sir; I do. And I might add that I am now working with the Social Security Administration in trying to come up with some alternative or improved formula to help them do the allocation that they have to do under the law. Our role is to provide meaningful data to them, and I do work with them to fulfill my mandate.

Senator FORD. But then under your statement, which you still agree with, is that with the glut now, it's overpriced because we have a glut.

Dr. MERKLEIN. Yes, but I would not be making policy. My role simply is not a policy-setting role.

Senator FORD. But in your advice here and your statement here is that because we have a glut today, that the product is overpriced.

Dr. MERKLEIN. Yes, sir.

Senator FORD. It doesn't have anything to do with the economy?

Dr. MERKLEIN. It has all kinds of impacts on the economy.

Senator FORD. Well, the economy doesn't have any impact on the glut?

Dr. MERKLEIN. Yes, it does too.

Senator FORD. OK, fine.

Dr. MERKLEIN. It's a mutually interdependent relationship.

Senator FORD. Doctor, would you provide for the committee at my request a full description of the procedures you will use in deciding to undertake and designing and carrying out self-generated analytical work at EIA?

Dr. MERKLEIN. I'll be happy to.

Senator FORD. Fine.

Thank you very much, Mr. Chairman.

[The information follows:]

All analytical work at EIA is subject to a rigorous and formal annual operating and multi-year planning process. This process works as follows:

Before embarking on its analysis program, each EIA program office seeks the input of interested parties, including other DOE offices, Congressional staff, other agencies, and outside groups. Suggestions from these sources, coupled with an EIA assessment of current and prospective energy issues, result in proposals for analytical studies. EIA Office Directors, reporting directly to the Administrator, are especially attuned to events occurring within their areas of expertise; e.g., oil, natural gas, coal, nuclear, electricity, renewables, integrated demand and supply analysis, energy consumption, etc. Established procedures are basic and thorough. Concurrent with, or after approval of, analytical topics, offices prepare formal proposals. No further work is initiated until approval of the proposal.

Formal proposals are prepared in a standard format and must contain all the informational items that are necessary for the Administrator's

decision. These items include, but are not limited to: a description of the analysis and an explanation why it is needed; a listing of the parties, within and outside Government, who have either requested, or have expressed an interest in, such analyses; the statutory requirements or authority which support the analysis; the assumptions to be used and the providers of such assumptions; the methodology to be applied; and the resources, both contractual and in-house, which are estimated to be needed for completion of the analysis. The proposal specifically delineates the time frame within which the study is to be conducted and the nature of the product--report, publication, etc.

With this information, the Administrator is able to assess the importance of the proposed analyses, and to rank them in accordance with available EIA resources. This enables him to arrive at a reasoned decision. Approved analysis plans are entered into EIA's management information systems together with their major milestones and completion dates.

The CHAIRMAN. Thank you, Senator.

Senator Evans.

Senator EVANS. Thank you, Mr. Chairman.

I listened with interest to the earlier byplay castigating lawyers and economists, and I'm delighted to have an engineer in front of us. We get some good, straight, honest statements.

Senator FORD. Spoken like a college president.

Senator EVANS. No, even before that as an engineer.

I listened with interest to your colloquy with the Senator from Kentucky. While I certainly agree with the general nature of market forces, would you agree that it's been true at least for close to 10 years that OPEC was able to distort those market forces through cartels?

Dr. MERKLEIN. Yes, sir.

Senator EVANS. So while market forces generally work, there are occasions when they can get truly distorted.

Dr. MERKLEIN. Senator Evans, we can agree that it would have been better if OPEC had been located in an area that falls within the jurisdiction of the U.S. Government.

That was not the case. The question at hand was how to use Government best to react to something that we could not control. The question then is, should we, within the country, try to preserve as

much as possible, market forces or not? And that is what this testimony was all about.

Senator EVANS. Sure. One of the major publications of the Energy Information Agency is your annual Energy Outlook with projections. Do you feel that the current data base on which those projections are based is sufficient? Do you have any intent to review and perhaps renovate that data base, or do you feel that the congressional mandate or requirements of the Energy Information Agency doesn't allow you to do that?

Does it constrain your ability to change or modify or improve the data bases on which these projections are made?

Dr. MERKLEIN. You are probably familiar, sir, with the PART report that came out last year that said that we were somewhat behind on the quality maintenance of our data base. We've had a $1½ million special allocation to help speed up the review of our frames and the documentation of our models. We are just about caught up with that, thanks to that extra $1½ million. And we feel that we are now in very good shape.

I'm sure that I can state, without qualification, that the data base we have today is as fine and as reliable a data base as any, anywhere. Not as detailed as some people would like, but it is very reliable.

Senator EVANS. Would you say that's generally uniformly true across the various energy supply lines, whether it's petroleum, electricity, or other energy sources?

Dr. MERKLEIN. I believe so. One could argue whether one should have more or less, and of course we in the budgetary process are arguing we should have a little less. I do not see problems in that area.

I do anticipate minor problems in forecasting. Our different models are of different complexity—and one in particular bothers me quite a bit—but I do not see anyone else who has a better model. There are just some subjects that lend themselves more easily to modeling than others. This one is a petroleum supply model; and Mother Nature has a role to play in it, and she is tricky.

So I would say weaknesses, if there are any, would predominantly be in that area.

Senator EVANS. In looking ahead at the projections made on energy outlook, relating back to my own experience with the Pacific Northwest Power Planning Council we were asked or required by law to look ahead 20 years and very rapidly discovered that it would be foolish indeed to try to pick any kind of single line projection for 20 years or a time lot shorter than that. We opted instead to try to distinguish the boundaries, the maximums and the minimums, and then try to relate our policies to meet whatever might happen within that maximum and minimum.

Does that make sense, and do you feel that that would be an appropriate way to make projections on your energy outlook that you're required to do?

Dr. MERKLEIN. Yes, we, too, are projecting in ranges, as you know. It would be somewhat unwise to come forward with a single point projection. It's bad enough as it is in ranges.

Senator EVANS. I know one of the particular programs that you put out that bothers me to a degree is the Electric Power Monthly where the retail price of electricity is detailed for 40 selected cities. That always gets read back to me every time we get into problems on electric power rates.

It seems to me that there perhaps are some distortions which creep in because of the narrowness of the cities selected. I wonder if you think it would be more appropriate to perhaps take broader regions and average them, to gain a better true sense of what's going on in various areas of the country. The city of Seattle may have one rate, but people living right across the street are paying twice as much or more for their electricity because they are supplied either by an investor-owned utility, or even another public agency across the county line.

It seems to me that that's one of the potential problems in the record keeping you do. The other is that you're relating it all to a uniform 500 kilowatt hours per month, which in some cases may represent a pretty fair share of all the electrical use in a community, but in others like the Northwest, it's a very small share in total electric use because electricity is such a large share of the energy supply.

What are your feelings as to the validity of what's done now, and whether some of these suggestions might give a more accurate picture or a better picture of the relationships?

Dr. MERKLEIN. I would not be in a position, off the top of my head, to discuss the accuracy of electricity pricing data. I will be happy to review it. It may very well be, Senator, that in the review our judgment might be that this is an accurate reporting. That is part of our independence also. It's independence both from the Secretary and from Members of Congress.

But I pledge to you that we will review this issue and we will work with you in seeing whether indeed a bias inadvertently has crept into the system.

Senator EVANS. I've no quarrel at all with the accuracy. I'm sure that the data as it is presented is accurate, at least insofar as I'm familiar with the case in the Northwest. It was just a question as to whether that is an appropriate kind of relationship that gives accurate signals to people who are reading the data.

Dr. MERKLEIN. That is correct. I understand you are referring to systematic bias that might have crept into our historical data base, and I pledge to you that I will look into that.

Senator EVANS. Good. Thank you very much. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Dr. Merklein. I have no further questions at this time. We appreciate your testimony.

I might just announce for the interest of those who are watching the progress of these nominations, that those who have questions to be submitted to the record for response in writing to the record, please have those questions to us by close of business today so that we can have the responses back by the first of the week.

If we could meet that schedule, it would then be our hope to be able to have an executive session of this committee next Wednesday to vote upon the nominations that are before us. If that time

frame proves to be unduly restrictive, then of course we would postpone that action in the committee for 1 week.

But if we can meet that timetable, we will attempt to do so, and if there are any difficulties I hope that people will communicate with us so that we can accommodate to the needs of the committee and to the needs of the witnesses in responding to questions.

This committee will stand adjourned.

[Whereupon, at 11:12 a.m., the hearing was adjourned.]

APPENDIXES

APPENDIX I

Biographies and Informational Statements of the Nominees

THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release April 18, 1985

The President today announced his intention to nominate Joseph F. Salgado to be Under Secretary of Energy. He would succeed William Patrick Collins.

Until February, Mr. Salgado had been an Associate Director of Presidential Personnel at the White House where he was responsible for energy, international and national security areas. Previously, he worked with the Department of Justice in the Immigration and Naturalization Service as the Associate Commissioner for Enforcement (January 1982 to August 1983).

Before joining the Administration, Mr. Salgado served as Deputy District Attorney and Senior Trial Attorney (1973-1981) for the Alameda County District Attorney's Office in California.

While a Sergeant of Police with the Oakland Police Department (1966-1973), Mr. Salgado graduated from San Francisco Law School (J.D., 1972) and received his Bachelor of Science degree from the University of San Francisco in 1968.

Mr. Salgado was born January 10, 1943 in San Diego, California and now resides in Alexandria, Virginia.

# # #

UNITED STATES SENATE
COMMITTEE ON ENERGY AND NATURAL RESOURCES
STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

Name: Salgado (LAST) Joseph (FIRST) Frank (OTHER)

Position to which nominated: Under Secretary, Dept. of Energy **Date of nomination:**

Date of birth: 10 January 1943 (DAY) (MONTH) (YEAR) **Place of birth:** San Diego, California

Marital status: Unmarried **Full name of spouse:** N/A

Name and ages of children None

Education:

Institution	Dates attended	Degrees received	Dates of degrees
O'Dea High School	1957-1961	diploma	5/1961
University of San Francisco	1961-1967	B.S.	6/2/68
San Francisco Law School	1968-1972	J.D.	3/6/72

Employment record: List below all positions held since college, including the title and description of job, name of employer, location, and dates.

See attached sheet.

JOSEPH F. SALGADO

EMPLOYMENT RECORD

2-19-85 to Present	Transition Coordinator, Department of Energy*, Washington, D.C. Assist Secretary Herrington in transition upon his confirmation as Secretary of Energy.
8-15-83 to 2-85	Associate Director, Presidential Personnel, the White House*, Washington, D.C. Responsible for the selection and recommendation of non-career appointees for the administration in energy related and national security areas.
1-82 to 8-83	Associate Commissioner for Enforcement, Immigration and Naturalization Service, Department of Justice, Washington, D.C. Overall responsibility for planning, directing, and managing all enforcement activities and programs throughout the Immigration and Naturalization Service.
2-73 to 1-82	Senior Trial Attorney and Deputy District Attorney, County of Alameda, Oakland, California. Responsible for policy formulation and implementation for county-wide programs. Supervised (deputy) felony and misdemeanor task forces. Extensive experience as a trial attorney.
8-66 to 1-73	Police Officer/Sergeant of Police, Patrolman and plainclothes juvenile officer. When promoted to Sergeant, street supervisor for law enforcement officers.
1975-1981	Law Instructor, San Francisco Law School, San Francisco, California. Taught criminal law and lectured at San Jose State University.

* detailed from the Department of Justice

Employment record—Continued

See attached sheet.

Military service: Describe any military service not listed above, including dates, rank, and type of discharge.

None

Honors and awards: List below all scholarships, fellowships, honorary degrees, military medals, honorary society memberships, and any other special recognitions for outstanding service or achievement.

Valedictorian - 45th Basic Recruitment Class
Oakland Police Department, 1967

AM-JUR Award - criminal procedure, 1970, San Francisco Law School

AM-JUR Award - evidence, 1972, San Francisco Law School

Memberships: List below all memberships and offices held in professional, fraternal, business, scholarly, civic, charitable and other organizations.

Organization	Dates	Office held (if any)
Oakland Police Officer's Widows and Orphan Fund	1974-present	None
California State Bar Association	1974-present	None
American Bar Association	74-75 and 82-83	None
International Association Chief's of Police	1982-present	None
National Hispanic Bar Association	1983-84	None
Oakland Police Officer Association, Oakland, CA	1966-73	None

Published writings: List the titles, publishers and dates of any books, articles, or reports you have written.

None

Future employment relationships:

1. Will you sever all connections with your present employer, business firm, association or organization if you are confirmed by the Senate?

Not Applicable

2. Do you have any plans after completing government service to resume employment, affiliation or practice with your current or any previous employer, business firm, association or organization?

No I do not.

3. Has a commitment for employment after you leave government been made to you by anyone? Have you made any such commitment?

a). No

b). No

4. (a) If you have been appointed for a fixed term, do you expect to serve the full term?

Not Applicable

Future employment relationships—Continued

(b) If you have been appointed for an indefinite term, are there any known limitations on your willingness or ability to serve for the foreseeable future?

I know of no limitation.

Financial statement:

1. Attach a copy of your Executive Personnel Financial Disclosure Report (SF 278).

2. List sources, amounts and dates of all anticipated receipts from deferred income arrangements, stock options, uncompleted contracts and other future benefits which you expect to derive from previous business relationships, professional services and firm memberships or from former employers, clients, and customers. Amounts should be indicated by the categories established for reporting income on Form SF 278, Schedule A.

None

3. Are you currently a party to any legal action? If so, describe its nature and status.

No

4. Have you ever declared bankruptcy? If so, describe the circumstances.

No

5. Have you filed a Federal income tax return for each of the last 10 years? If not, please explain.

Yes

6. Has the Internal Revenue Service ever audited your Federal tax return? If so, what resulted from the audit?

Yes. As a result of two senerate audits, one in 1968, I paid the IRS approximately $150 and in 1981 the IRS paid me approximately $120 refund.

Potential conflicts of interest:

1. List any investments, obligations, liabilities, or other relationships which might involve potential conflicts of interest with the position to which you have been nominated.

None

2. Describe any business relationship, dealing or financial transaction (other than taxpaying) that you have had during the last 10 years with the Federal Government, whether for yourself or relatives, on behalf of a client, or acting as an agent, which might in any way constitute or result in a possible conflict of interest with the position to which you have been nominated.

None

3. Describe any lobbying activity which you have performed during the past 10 years with respect to legislative or administrative actions at the Federal, State or local level.

None

4. Have you been informed of the conflict of interest laws and regulations applicable to the position to which you have been nominated?

Yes

Potential conflicts of interest—Continued

5. Explain how you will resolve any potential conflict of interest that may be disclosed by your responses to this form and the attachments thereto. Attach a statement of the appropriate agency ethics official explaining the applicable laws or regulations, any potential conflicts, and the action required to resolve such conflicts.

I know of no conflict of interest or the potential for any conflict of interest.

6. Explain how you will resolve any potential conflicts of interest that may arise in the future if you are confirmed for the position for which you have been nominated.

I would seek counsel from the Department of Energy's Ethics Division in the General Counsel's Office and follow their guidance to avoid any real or perceived conflict of interest.

Public disclosure: Do you have any objections to this form and the attachments thereto being made public?

No

AFFIDAVIT

I, Joseph F. Salgado, being duly sworn, hereby state that I have read the foregoing Statement for Completion by Presidential Nominees, including all attachments thereto, and that the information provided therein is, to the best of my knowledge and belief, current, accurate, and complete.

(Signature of Nominee)

Subscribed and sworn to before me this 18th day of April, 19 85

Notary Public

My Commission expires July 31, 1989

Form approved by the Committee February 6, 1985.

U.S. GOVERNMENT PRINTING OFFICE 1985—43-095

United States of America
Office of Government Ethics

Office of Personnel Management
Washington, D.C. 20415

APR 19 1985

Honorable James A. McClure
Chairman, Committee on Energy and
Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

In accordance with the Ethics in Government Act of 1978, I enclose a copy of the financial disclosure report filed by Joseph F. Salgado, who has been nominated by President Reagan for the position of Under Secretary, Department of Energy.

We have reviewed the report and have also obtained advice from the Department of Energy concerning any possible conflict in light of the Department's functions and the nominee's proposed duties. Based thereon, we believe that Mr. Salgado is in compliance with applicable laws and regulations governing conflicts of interest.

Sincerely,

David H. Martin
Director

Enclosure

FINANCIAL DISCLOSURE REPORT

Page 1

Reporting Status (Check Appropriate Box)

☐ Incumbent ☒ New Entrant, Nominee, or Candidate ☐ Termination Report

NOTE
All schedules must be filled. Enter "None" in areas or across schedules where appropriate

Agency Use Only	OGE Use Only
Date of Filing (Month, Day, Year) MAR 13 1985	

	Last Name	First Name and Middle Initial	Date of Appointment, Candidacy, Election or Nomination (Mo., Day, Yr.)	Termination Date (If Applicable) (Month, Day, Year)
Reporting Individual's Name	SALGADO,	JOSEPH F.		
Position for Which Filing	Title of Position UNDER SECRETARY	Department or Agency (If Applicable) DEPARTMENT OF ENERGY		
Location of Present Office	Address (Number, Street, City, State and Zip Code) Room 7A-235, Department of Energy, Forrestal Building 1000 Independence Avenue, S.W., Washington, D.C. 20585		Room Number 7A-235	Telephone No. (Include Area Code) (202) 252-6476

Presidential Nominee Subject to Senate Confirmation	Name of Congressional Committee Considering Nomination Senate Committee On Energy And Natural Resources	Do You Intend to Create a Qualified Diversified Trust? ☐ Yes ☒ No

Position(s) Held With the Federal Government During the Preceding 12 Months (If Same as Above, Write Same)	Title of Position(s) and Date(s) Held Associate Director, Presidential Personnel The White House, 8/1983 to Present

Certification	Signature of Reporting Individual	Date (Month, Day, Year) 2/27/85
I CERTIFY that the statements I have made on this form and all attached schedules are true, complete and correct to the best of my knowledge and belief.		

Agency Ethics Official's Opinion	Signature of Designated Agency Ethics Official Reviewing Official	Date (Month, Day, Year) 3/19/85
On the basis of information contained in this report, I conclude that the filer complies with applicable laws and regulations.	Roger D. Greenberg	
Agency Ethics Official's Opinion and Certification of Compliance by Government Employee (Optional Use Only)	Signature	Date (Month, Day, Year)

Additional Information (If additional space is required, use the reverse side of this sheet)

(Check box if comments are continued on the reverse side) ☐

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INCOME AND INTERESTS IN PROPERTY

This schedule is applicable in the case of all reporting individuals

Do you, your spouse, or dependent child receive income from, or have a beneficial interest in a trust? — No: X

If "Yes," have you reported the income from the trust? — No:

If "Yes," have you reported the assets of the trust? — No:

If "Yes," is the trust an "unqualified" trust? — No: "Unqualified" trust?

Are there any oil, gas, mineral, or other natural resource interests in property, purchases, sales, or exchanges, or royalties of a spouse or dependent child which you have not reported? — No: X

If "Yes," do you certify to all of the following?
1. They represent solely your spouse's or dependent child's financial interest or responsibility.
2. They are not, in any way, paid or payable, derived from your income, assets, or activities.
3. You neither derive, nor expect to derive, any financial or economic benefit from them; and
4. You do not have knowledge as to the composition of such interest or holdings. — No:

Page Number: 2 — Schedule: A

Reporting Individual's Name: Salgado, Joseph F.

Date of Filing (Month, Day, Year): MAR 13 1985

Identification	Income: Type of Income	Income: Category of Amount or Value	Interests in Property: Valuation of Assets
424 Bellevue Avenue, Oakland, California — Rental Property	Rents: X	$100,001 - $1,000,000: X	Value: A; Other: X
950 Bollinger Canyon, Moraga, California — Rental Property	Rents: X	$100,001 - $1,000,000: X	Value: A; Other: X
Home Savings Money Market	Interest: X	$1,001 - $10,000: X	Value: H; $10,001 - $100,000: X
Placerville, CA, Parcel #327: 02-05 — Unimproved Land		Real property per Item B (Part I): X	Value: A; $10,001 - $100,000: X
C. Pickenecher — Promissory Note	Interest: X	$10,001 - $100,000: X	(Note paid 2/85)

SF 278 - Financial Disclosure Report
(Rev. 9/94)

PURCHASES, SALES, AND EXCHANGES

Title schedule is applicable only in the case of annual and termination reports.

Page Number	3	Schedule B
Reporting Individual's Name: Salgado, Joseph F.		
Agency Use Only		
Date of Filing (Month, Day, Year): MAR 13 1995		

Report Applicable Transactions, Even if Also Reported on Schedule A

S or DC	Identification of Property (real and personal)	Type of Transaction: Purchase	Sale	Exchange	Date (Month, Day, Year): Purchase	Sale or Exchange	Category of Amount or Value ( ): $1,001 to $15,000	$15,001 to $50,000	$50,001 to $100,000	$100,001 to $250,000	Over $250,000
	None										

GIFTS AND REIMBURSEMENTS

This schedule is applicable only in the case of annual and termination reports.

Page Number	4	Schedule C

Reporting Individual's Name
Salgado, Joseph F.
Agency Use Only

Date of Filing (Month, Day, Year)
MAR 13 1985

I Lodging, Transportation, Food and Entertainment—List each source totaling $250 or more in value

Apt	Source (Name and Address)	Brief Description	Value
	None		

II—All Other Gifts—List each source totaling $100 or more in value

Apt	Source (Name and Address)	Brief Description	Value
	None		

III Reimbursements—List each source totaling $250 or more in value

Apt	Source (Name and Address)	Brief Description	Value
	None		

Form 278 Executive Branch Personnel Public Financial Disclosure Report
Rev. 6/85

This schedule, except as noted for the third section, is applicable to the case of all reporting individuals.

Reporting Individual's Name: Salgado, Joseph F.

Agency Use Only
Date of Filing (Month, Day, Year): MAR 13 1985

Page Number: 5

Schedule: D

LIABILITIES

Name and Address of Creditor	Type of Liability (e.g., promissory note, margin account) (Give date, interest rate and, if applicable, term)	Category of Amount or Value: $10,001 to $50,000	$50,001 to $100,000	$100,001 to $1,000,000	Over $1,000,000
Home Savings, Department 05051, Los Angeles, CA	Promissory Note, 11.75% - AML 40 years				X
Mr. Douglas McLeod, P.O. Box 421, Moraga, CA	Promissory Note, 13% - 10 year WRAP (Commenced in 1981)				X

POSITIONS HELD

Name and Address of Organization	Type of Organization	Position Held	From (Mo., Yr.)	To (Mo., Yr.)
None				

COMPENSATION IN EXCESS OF $5,000 PAID BY ONE SOURCE

This section is applicable only in the case of nominees and new entrants.

Name of Source	Brief Description of Duties
N/A None [signature] 3/19/85	

RELATIONS WITH OTHER EMPLOYERS

Name and Address of Employer	Date Relationship Began	Date (Mo., Day, Yr.)
None		

Department of Energy
Washington, DC 20585

April 22, 1985

The Honorable James A. McClure
Chairman
Committee on Energy and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

Please be advised that, pursuant to section 201(b) of the Ethics in Government Act of 1978, as amended, I have informed the appropriate ethics officials that the information required by section 202(a)(1)(A) with respect to income and honoraria is current as of Monday, April 22, 1985. This date is within five days prior to the date of the first hearing scheduled to consider my nomination.

Sincerely yours,

Josep[illegible]

District [illegible]olumbia ss

Subscribe[illegible] and sworn to before me this 22nd day of April, 1985.

[illegible] Public

My Commission Ex[illegible] uly 31, 1989

cc: Honorable J. Bennett Johnston

United States Government | Department of Energy

memorandum

DATE: APR 18 1985

REPLY TO ATTN OF: GC-44

SUBJECT: Statement of Agency Ethics Official for Senate Committee

TO: Joseph F. Salgado

This memorandum is intended to serve as a statement from the designated agency ethics official for this Department, as required by question 5, page 6, of the Statement for Completion by Presidential Nominees that you are submitting to the United States Senate Committee on Energy and Natural Resources in connection with your nomination for the position of Under Secretary. I have reviewed your Standard Form 278 (Financial Disclosure Report) dated February 27, 1985, and your Form DOE-460 (Report on Prior Employment) dated February 12, 1985, and have certified that the information contained therein discloses no conflict of interest under applicable laws and regulations. 1/

As a supervisory employee of the Department, you are prohibited by section 602(a) of the DOE Organization Act (Pub. L. 95-91) from knowingly receiving compensation from, holding any official relation with, or having any pecuniary interest in any energy concern. The term "energy concern" is defined in section 601(b) of the Act as any entity "significantly engaged in the business" of any of a variety of activities related to energy production, distribution, sale, or research and development, or any entity significantly engaged in such research and development pursuant to a DOE-funded program irrespective of whether it otherwise engages in such business. The term also includes any entity holding an interest in property from which an energy resource is commercially produced or obtained.

In addition, section 208, title 18, United States Code, prohibits you from participating personally and substantially, as a Government employee, in any particular matter in which, to your knowledge, you have or your spouse, minor child, partner, organization in which you are serving as officer, director, trustee, partner, or employee, or any person or organization

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1/ Section 201(b) of the Ethics in Government Act (Pub. L. 95-521) requires the income and honoraria information on your form to be updated within five days before the date of the Committee hearing to consider your nomination.

with whom you are negotiating or have any arrangement concerning prospective employment has, a financial interest. Accordingly, you should avoid participation in any particular matter the outcome of which could have a direct and predictable effect on any such financial interests.

Please let me know if I can be of further assistance.

Ralph D. Goldenberg
Assistant General Counsel
for General Law

cc: Larry Garrett, White House
Gary Davis, OGE

J. MICHAEL FARRELL

J. Michael Farrell was nominated to be General Counsel for the U.S. Department of Energy (DOE) on March 28, 1985. As DOE's General Counsel, Mr. Farrell will be responsible for the Department's legal programs and policies with the exception of those related to the Federal Energy Regulatory Commission, which maintains a separate legal staff.

Since 1983 Mr. Farrell practiced law in Washington as counsel to the law firm of Glynn & Graham; 1982 - 1983 he was Private Sector Coordinator of the Caribbean Basin Initiative at the Department of State; 1981 - 1982, Deputy Director, Office of Presidential Personnel, White House; 1981 - Assistant Counsel, Office of the Counsel to the President, White House; and 1968 - 1981, member of the law firm, O'Connor & Farrell.

He received a B.S.B.A. from Georgetown University in 1963 and a J.D. degree from the Georgetown University Law Center in 1966. Mr. Farrell is a member of the District of Columbia Bar and the Federal Bar Association.

Mr. Farrell was born and resides in Washington, D.C. He is married and has three children.

UNITED STATES SENATE
COMMITTEE ON ENERGY AND NATURAL RESOURCES

STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

Name: FARRELL (LAST) JAMES (FIRST) MICHAEL (OTHER)

Position to which nominated: GENERAL COUNSEL, DEPARMTENT OF ENERGY Date of nomination: MARCH 28, 1985

Date of birth: 30 (DAY) 3 (MONTH) 41 (YEAR) Place of birth: WASHINGTON, DC

Marital status: MARRIED Full name of spouse: CATHERINE WEBSTER

Name and ages of children

J. ROBERT	11	
SCOTT	8	
ANDREW	4	

Education:

Institution	Dates attended	Degrees received	Dates of degrees
GEORGETOWN UNIVERSITY	1959 - 1963	B.S.B.A.	1963
GEORGETOWN UNIVERSITY LAW CENTER	1963 - 1966	J.D.	1966

Employment record: List below all positions held since college, including the title and description of job, name of employer, location, and dates.

SOLE PRACTITIONER AS OF COUNSEL TO LAW FIRM OF GLYNN & GRAHAM, WASHINGTON, DC, 6/83 - present;

GLOBAL USA, INC., AS VICE PRESIDENT AND DIRECTOR, WASHINGTON, DC 6/83 -12/84;

DEPARTMENT OF STATE, PRIVATE SECTOR COORDINATOR FOR THE CARIBBEAN BASIN INITIATIVE, WASHINGTON, DC, 6/82 - 5/83;

THE WHITE HOUSE, DEPUTY DIRECTOR OF PRESIDENTIAL PERSONNEL OFFICE, WASHINGTON, DC, 5/81 - 6/82;

Employment record—Continued

THE WHITE HOUSE, ASSISTANT COUNSEL, OFFICE OF COUNSEL TO THE PRESIDENT, WASHINGTON, DC, 1/81 - 5/81;
O'CONNOR & FARRELL, PARTNER, WASHINGTON, DC, 1/79-1/81 and 6/68-8/77;
FARRELL & DALY, PARTNER, WASHINGTON, DC, 9/77 - 12/78;
KILROY & SULLIVAN, ASSOCIATE COUNSEL, WASHINGTON, DC, 7/67 - 6/68;
FEDERAL HOME LOAN BANK BOARD, ATTORNEY, WASHINGTON, DC, 8/66 - 6/67;
DOW, LOHNES & ALBERTSON, LAW CLERK, WASHINGTON, DC, 7/65 - 8/66.

Military service: Describe any military service not listed above, including dates, rank, and type of discharge.

NONE

Honors and awards: List below all scholarships, fellowships, honorary degrees, military medals, honorary society memberships, and any other special recognitions for outstanding service or achievement.

NONE

Memberships: List below all memberships and offices held in professional, fraternal, business, scholarly, civic, charitable and other organizations.

Organization	Dates	Office held (if any)
GEORGETOWN UNIVERSITY ALUMNI ASSOCIATION	1966 - present	PRESIDENT '75
CONGRESSIONAL COUNTRY CLUB	1977 - present	NONE
SOCIETY OF MAYFLOWER DESCENDENTS	1976 - present	NONE
D.C. BAR ASSOCIATION	1972 - present	NONE
FEDERAL BAR ASSOCIATION	1976 - present	NONE
GEORGETOWN UNIVERSITY EXPORT-IMPORT CENTER	1982 - present	COUNSEL TO THE BOARD

Published writings: List the titles, publishers and dates of any books, articles, or reports you have written.

NONE

Future employment relationships:

1. Will you sever all connections with your present employer, business firm, association or organization if you are confirmed by the Senate?

YES

2. Do you have any plans after completing government service to resume employment, affiliation or practice with your current or any previous employer, business firm, association or organization?

NO

3. Has a commitment for employment after you leave government been made to you by anyone? Have you made any such commitment?

NO

4. (a) If you have been appointed for a fixed term, do you expect to serve the full term?

NOT APPLICABLE

Future employment relationships—Continued

(b) If you have been appointed for an indefinite term, are there any known limitations on your willingness or ability to serve for the foreseeable future?

NONE

Financial statement:

1. Attach a copy of your Executive Personnel Financial Disclosure Report (SF 278).

2. List sources, amounts and dates of all anticipated receipts from deferred income arrangements, stock options, uncompleted contracts and other future benefits which you expect to derive from previous business relationships, professional services and firm memberships or from former employers, clients, and customers. Amounts should be indicated by the categories established for reporting income on Form SF 278, Schedule A.

NONE

3. Are you currently a party to any legal action? If so, describe its nature and status.

NO

4. Have you ever declared bankruptcy? If so, describe the circumstances.

NO

5. Have you filed a Federal income tax return for each of the last 10 years? If not, please explain.

YES

6. Has the Internal Revenue Service ever audited your Federal tax return? If so, what resulted from the audit?

NO

Potential conflicts of interest:

1. List any investments, obligations, liabilities, or other relationships which might involve potential conflicts of interest with the position to which you have been nominated.

NONE

2. Describe any business relationship, dealing or financial transaction (other than taxpaying) that you have had during the last 10 years with the Federal Government, whether for yourself or relatives, on behalf of a client, or acting as an agent, which might in any way constitute or result in a possible conflict of interest with the position to which you have been nominated.

NONE

3. Describe any lobbying activity which you have performed during the past 10 years with respect to legislative or administrative actions at the Federal, State or local level.

AS LEGAL COUNSEL TO GLOBAL USA, INC., I REGISTERED WITH THE U.S. CONGRESS AS A LOBBYIST FOR FANUC, LTD., MAZAK CORPORATION AND KOMATSU, LTD. HOWEVER, I NEVER ENGAGED IN ANY LOBBYING ACTIVITIES ON BEHALF OF THESE CORPORATIONS.

4. Have you been informed of the conflict of interest laws and regulations applicable to the position to which you have been nominated?

YES

Potential conflicts of interest—Continued

5. Explain how you will resolve any potential conflict of interest that may be disclosed by your responses to this form and the attachments thereto. Attach a statement of the appropriate agency ethics official explaining the applicable laws or regulations, any potential conflicts, and the action required to resolve such conflicts.

NONE

6. Explain how you will resolve any potential conflicts of interest that may arise in the future if you are confirmed for the position for which you have been nominated.

I INTEND TO TERMINATE MY RELATIONSHIPS WITH GLYNN & GRAHAM AND THE GEORGETOWN UNIVERSITY EXPORT-IMPORT CENTER EFFECTIVE ON APPOINTMENT TO THE POSITION OF GENERAL COUNSEL, U.S. DEPARTMENT OF ENERGY. IN ADDITION, I WILL AVOID ANY PARTICIPATION IN ANY PARTICULAR MATTER T OUTCOME OF WHICH COULD HAVE A DIRECT AND PREDICTABLE EFFECT ON ANY ENTITY IN WHICH I HAVE A FINANCIAL INTEREST. I WILL ALSO CONTINUE TO SEEK AND COMPLY WITH ADVICE FROM THE OFFICE OF GENERAL COUNSEL, U.S. DEPARTMENT OF ENERGY.

Public disclosure: Do you have any objections to this form and the attachments thereto being made public?

NO

AFFIDAVIT

DISTRICT OF COLUMBIA) ss

I, J. Michael Farrell, being duly sworn, hereby state that I have read the foregoing Statement for Completion by Presidential Nominees, including all attachments thereto, and that the information provided therein is, to the best of my knowledge and belief, current, accurate, and complete.

J. Michael Farrell
(Signature of Nominee)

Subscribed and sworn to before me this 17th day of April, 19 85

Cheryl D. Arrington
Notary Public

My Commission Expires November 14, 1989

Form approved by the Committee February 5, 1985.

U.S. GOVERNMENT PRINTING OFFICE: 1985—43-095

United States of America
Office of Government Ethics

Office of Personnel Management
Washington, D.C. 20415

APR - 4 1985

Honorable James A. McClure
Chairman, Committee on Energy
and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

In accordance with the Ethics in Government Act of 1978, I enclose a copy of the financial disclosure report filed by J. Michael Farrell, who has been nominated by President Reagan for the position of General Counsel, Department of Energy.

We have reviewed the report and have also obtained advice from the Department of Energy concerning any possible conflict in light of the Department's functions and the nominee's proposed duties. The Department indicates that Mr. Farrell intends to terminate his relationship with Glynn and Graham upon confirmation. Subject to our review of the termination agreement, we believe that Mr. Farrell is in compliance with applicable laws and regulations governing conflicts of interest.

Sincerely,

David H. Martin
Director

Enclosure

FINANCIAL DISCLOSURE REPORT

U.S. Office of Personnel Management

Form Approved OMB No. 3209-0007

Reporting Status (Check Appropriate Box)

☐ Incumbent ☒ New Entrant, Nominee, or Candidate ☐ Termination Report

NOTE All schedules must be filed. Enter "None" in areas or across schedules where appropriate.

Agency Use Only	OGE Use Only
Date of Filing (Month, Day, Year): MAR 13 1985	

	Last Name	First Name and Middle Initial	Date of Appointment, Candidacy, Election or Nomination (Mo., Day, Yr.)	Termination Date (If Applicable) (Month, Day, Year)
Reporting Individual's Name	Farrell	J. Michael		
Position for Which Filing	Title of Position: General Counsel	Department or Agency (If Applicable): Department of Energy		
Location of Present Office	Address (Number, Street, City, State and Zip Code): 1920 N Street, N.W. Washington, D.C. 20036		Room Number: 740	Telephone No. (Include Area Code): 202-293-6960

Presidential Nominees Subject to Senate Confirmation

Name of Congressional Committee Considering Nomination: Energy and Natural Resources

Do You Intend to Create a Qualified Diversified Trust? ☐ Yes ☒ No

Position(s) Held With the Federal Government During the Preceding 12 Months (If Not Same as Above)

Title of Position(s) and Date(s) Held: Consultant, Department of Energy February 13, 1985 to the present

Certification

I CERTIFY that the statements I have made on this form and all attached schedules are true, complete and correct to the best of my knowledge and belief.

Signature of Reporting Individual: J. Michael Farrell

Date (Month, Day, Year): February 19, 1985

Agency Ethics Official's Opinion

The information contained in this report discloses no conflict of interest under applicable laws and regulations.

Signature of Designated Agency Ethics Official/Reviewing Official: Roger D. Greenberg

Date (Month, Day, Year): 3/19/85

Office of Government Ethics Use Only

Signature:

Date (Month, Day, Year):

Comments of Reviewing Officials (If additional space is required, use the reverse side of this sheet)

Mr. Farrell intends to terminate his relationships with Bryan & Graham and the Georgetown University Legal Research Center effective upon appointment to the position of General Counsel, DOE. RDG 3/19/85

(Check box if comments are continued on the reverse side) ☐

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This schedule is applicable in the case of all reporting individuals

	Yes	No
Do you, your spouse, or dependent child receive income from, or have a beneficial interest in a trust?		X
If "yes", have you reported the income from the trust?		
If "yes", have you reported the assets of the trust?		
If "yes", is this trust an "excepted" trust?		
or "qualified" trust?		

	Yes	No
Are there any interests in property, purchases, sales, or exchanges, or liabilities of a spouse or dependent child which you have not reported?		X
If "Yes," do you certify to all of the following? 1. They represent solely your spouse's or dependent child's financial interest or responsibility; 2. They are not, in any way, past or present, derived from your income, assets, or activities; 3. You neither derive, nor expect to derive, any financial or economic benefit from them; and 4. You do not have knowledge as to the composition of such interest or liabilities.		

Page Number 2 — Schedule A

Reporting Individual's Name: J. Michael Farrell

Agency Use Only

Date of Filing: MAR 13 1985

Schedule (S) or Dependent Child (DC)	Identification	Income: Type of Income	Income: Category of Amount or Value	Interests in Property: Valuation of Assets
		Dividends; Rent; Interest; Capital Gains; Excepted Trust; Qualified Trust; Other (Specify)	None (or less than $101); $101 - $1,000; $1,001 - $2,500; $2,501 - $5,000; $5,001 - $15,000; $15,001 - $50,000; $50,001 - $100,000; $100,001 - $1,000,000; Over $1,000,000; Actual Amount (Only if "Other" Specified); Date (Mo., Day, Yr.) (Only if Honoraria)	Valuation Unknown; $1,001 - $5,000; $5,001 - $15,000; $15,001 - $50,000; $50,001 - $100,000; $100,001 - $250,000; Over $250,000
	~~Glynn & Cochon~~ Gold MacTavish	Legal Services	$123,700	
	National Bank of Washington	X	X	H X
	Riggs National Bank	X	X	H X
	Alliance Tax-Exempt Reserves, Inc.	X	X	H X
	Nuveen Tax-Exempt Bond Fund	X	X	H X
	Washington Federal Savings and Loan Association (Keogh)	X	X	H X
	National Bank of Washington (IRA)	X	X	H X
S	National Bank of Washington (IRA)	X	X	H X
	Sold for long term capital gain 5% interest in Global USA, Inc.	X	X	H X
	Valuations are the value at the date this Report was prepared			

(Rev. 6/84)

PURCHASES, SALES, AND EXCHANGES

This schedule is applicable only in the case of annual and termination reports.

Page Number	3	Schedule B

Reporting Individual's Name: J. Michael Farrell

Agency Use Only

Date of Form Filed: MAR 13 1985

Report Applicable Transactions, Even If Also Reported on Schedule A

Asset Code	Identification of Property (real and personal)	Type of Transaction: Purchase	Sale	Exchange	Date (Month, Day, Year): Purchase	Sale or Exchange	Category of Amount or Value ( ): $1,001 to $5,000	$5,001 to $15,000	$15,001 to $50,000	$50,001 to $100,000	$100,001 to $250,000	Over $250,000
	Not Applicable											

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GIFTS AND REIMBURSEMENTS

This schedule is applicable only in the case of annual and termination reports.

Page Number	4	Schedule C

Reporting Individual's Name: J. Michael Farrell

Agency Use Only

Date of Filing (Month, Day, Year): MAR 13 1985

I. Lodging, Transportation, Food and Entertainment—*List each source totaling $250 or more in value*

S or SC	Source (Name and Address)	Brief Description	Value
	Not Applicable		

II—All Other Gifts—*List each source totaling $100 or more in value*

S or SC	Source (Name and Address)	Brief Description	Value
	Not Applicable		

III. Reimbursements—*List each source totaling $250 or more in value*

S	Source (Name and Address)	Brief Description	Value
	Not Applicable		

This schedule, except as noted for the third section, is applicable in the case of all reporting individuals.

Reporting Individual's Name	Agency Use Only	Page Number		Schedule
J. Michael Farrell	Date of Filing (Mo., Day, Yr.) MAR 13 1985		5	D

LIABILITIES

S or DC	Name and Address of Creditor	Type of Liability (e.g., promissory note, margin account) Give date, interest rate and, if applicable, term	Category of Amount or Value ($) $10,001 to $15,000	$15,001 to $50,000	$50,001 to $100,000	$100,001 to $250,000	Over $250,000
	None						

POSITIONS HELD

Name and Address of Organization	Type of Organization	Position Held	From (Mo., Yr.)	To (Mo., Yr.)
Global USA, Inc. 1823 Jefferson Place, NW, Washington, DC 20036	Consulting Firm	Vice President/ Director	6/83	12/84
Glynn & Graham 1920 N Street, NW, Washington, DC 20036	Law Firm	of Counsel	6/83	Present
GEORGETOWN GOVT. EXPORT IMPORT CENTER	UNIVERSITY	OF COUNSEL (VOLUNTARY)	SPRING/84	PRESENT

COMPENSATION IN EXCESS OF $5,000 PAID BY ONE SOURCE This section is applicable only in the case of nominees and new entrants.

Source (Name and Address)	Brief Description of Duties
Global USA, Inc. 1823 Jefferson Place, NW, Washington, DC 20036	Legal Advice
Early California Industries, Inc. 10960 Wilshire Blvd., Los Angeles, CA 90024	Legal Advice
Foundation for the Private Sector, Inc. 310 Constitution Ave., NE, Washington, DC 20001	Legal Advice
Republican National Committee, 310 1st St,SE,DC 20001	Legal Advice
Telephone Access, Inc., 1725 K St. NW, DC 20006	Legal Advice

RELATIONS WITH OTHER EMPLOYERS

Description of Terms of Any Agreement or Arrangement	Parties	Date (Mo., Day, Yr.)
EXPECT TO RECEIVE NON-CONTINGENT FEE IN AMOUNT BELOW $1000 FROM ALUMINUM DISTRIBUTORS, INC., OF FOREST PARK, IL FOR LEGAL SERVICES RENDERED PRIOR TO ASSUMING ASSUMING POSITION FOR WHICH FILING. PARTIAL PAYMENT FOR SUCH SERVICES (BELOW REPORTING THRESHOLD FOR SCHED. D) ALREADY RECEIVED		

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Department of Energy
Washington, DC 20585

The Honorable James A. McClure
Chairman
Committee on Energy and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

Please be advised that, pursuant to section 201(b) of the Ethics in Government Act of 1978, as amended, I have informed the appropriate ethics officials that I have recently received payment of a fee of $1,300 from Aluminum Distributors, Inc. This is the payment referred to in the last section of Schedule D of my Standard Form 278 dated February 19, 1985. With this addition, my Standard Form 278 is current as of April 23, 1985, with respect to the information required by section 202(a)(1)(A) regarding income and honoraria. This date is within five days prior to the date of the first hearing scheduled to consider my nomination.

Sincerely yours,

J. Michael Farrell

DISTRICT OF COLUMBIA ss

Subscribed and sworn to before me this 23rd day of April, 1985.

Notary Public
My Commission Expires November 14, 1989

cc: The Honorable J. Bennett Johnston

DOE F 1325.8
(7-79)

U.S. DEPARTMENT OF ENERGY

memorandum

DATE APR 4 1985

REPLY TO ATTN OF GC-44

SUBJECT Statement of Agency Ethics Official for Senate Committee

TO J. Michael Farrell

This memorandum is intended to serve as a statement from the designated agency ethics official for this Department, as required by question 5, page 6, of the Statement for Completion by Presidential Nominees that you are submitting to the United States Senate Committee on Energy and Natural Resources in connection with your nomination for the position of General Counsel. I have reviewed your Standard Form 278 (Financial Disclosure Report) dated February 19, 1985, and your Form DOE-460 (Report on Prior Employment) dated February 14, 1985, and have certified that the information contained therein discloses no conflict of interest under applicable laws and regulations. 1/

As a supervisory employee of the Department, you are prohibited by section 602(a) of the DOE Organization Act (Pub. L. 95-91) from knowingly receiving compensation from, holding any official relation with, or having any pecuniary interest in any energy concern. The term "energy concern" is defined in section 601(b) of the Act as any entity "significantly engaged in the business" of any of a variety of activities related to energy production, distribution, sale, or research and development, or any entity significantly engaged in such research and development pursuant to a DOE-funded program irrespective of whether it otherwise engages in such business. The term also includes any entity holding an interest in property from which an energy resource is commercially produced or obtained.

In addition, section 208, title 18, United States Code, prohibits you from participating personally and substantially, as a Government employee, in any particular matter in which, to your knowledge, you have or your spouse, minor child, partner, organization in which you are serving as officer, director, trustee, partner, or employee, or any person or organization with whom you are negotiating or have any arrangement concerning prospective employment has, a financial interest. Accordingly, you should avoid participation in any particular matter the outcome of which could have a direct and predictable effect on any such financial interests.

1/ Section 201(b) of the Ethics in Government Act (Pub. L. 95-521) requires the income and honoraria information on your form to be updated within five days before the date of the Committee hearing to consider your nomination.

You indicated on Schedule D of your Standard Form 278 that you presently hold "of counsel" positions with the law firm of Glynn & Graham and with Georgetown University's Export Import Center. You have undertaken to terminate these relationships effective upon your appointment to the position of General Counsel, Department of Energy.

Please let me know if I can be of further assistance.

Ralph D. Goldenberg
Assistant General Counsel
for General Law

BIOGRAPHY AND INFORMATIONAL STATEMENT OF THEODORE J. GARRISH

Theodore J. Garrish was nominated to be Assistant Secretary for Congressional, Intergovernmental and Public Affairs for the U.S. Department of Energy (DOE) on March 27, 1985. In this position, Mr. Garrish would be responsible for coordinating the Department's legislative programs and DOE's relationship's with members of Congress; activities involving State, local, and American Indian Governments; the Office of Public Affairs; the Office of the Press Secretary; DOE's Office of Competition, and Office of Consumer Affairs.

Mr. Garrish is currently serving as Acting Assistant Secretary for Congressional, Intergovernmental and Public Affairs. Before accepting this assignment, he had served as DOE's General Counsel since May 1983, where he was responsible for the Department's legal programs and policies. Mr. Garrish previously served as special assistant to the Secretary of Energy, with primary responsibility for coordinating efforts on natural gas legislation. Mr. Garrish was Legislative Counsel at the Department of the Interior (1981-1982) before coming to DOE in November 1982.

From 1978 until joining the Interior Department, he was a partner in the Washington, D.C. law firm of Deane, Snowdon, Shutler, Garrish and Gherardi. He was General Counsel at the U.S. Consumer Product Safety Commission, 1976-1978; Assistant to the Secretary of the Interior in 1976 and 1974-1975; Assistant to the Special Counsel in the White House, 1974,.and senior trial attorney and chief of the Advertising Evaluation Section at the Federal Trade Commission, 1973-1974.

He received a B.A. degree from the University of Michigan in 1964 and a J.D. degree cum laude from Wayne State University in 1968. He is a member of the bar in the State of Michigan and the District of Columbia.

A native of Lathrup Village, Oakland County, Michigan, he has two children and resides in Alexandria, Virginia.

UNITED STATES SENATE
COMMITTEE ON ENERGY AND NATURAL RESOURCES

STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

Name: Garrish (LAST) Theodore (FIRST) John (OTHER)

Position to which nominated: Assistant Secretary, Cong, Intergovernmental & Public Affairs, Dept of Energy

Date of nomination: March 28, 1985

Date of birth: 6 (DAY) 1 (MONTH) 43 (YEAR)

Place of birth: Detroit, Michigan

Marital status: Divorced

Full name of spouse:

Name and ages of children: Theodore John Garrish, Jr. 16
Amelia Sutter Garrish 10

Education:

Institution	Dates attended	Degrees received	Dates of degrees
Wayne State University	1965-1968	J.D.	1968
University of Michigan	1960-1964	A.B.	1964

Employment record: List below all positions held since college, including the title and description of job, name of employer, location, and dates.

General Counsel, U.S. Department of Energy, Washington, D.C.
May 1983 to Present

Special Assistant to the Secretary, U.S. Department of Energy,
Washington, D.C. - 1982 to May 1983

Legislative Counsel, U.S. Department of the Interior,
Washington, D.C. - 1981-1982

Partner, Deane, Snowdon, Shutler, Garrish & Gherardi,
Washington, D.C. - 1978-1981

General Counsel (Solicitor), U.S. Consumer Product Safety Commission,
Washington, D.C. - 1976-78

Assistant to the Secretary, U.S. Department of the Interior,
Washington, D.C. - 1976

Deputy General Counsel, U.S. Office of Consumer Affairs,
Washington, D.C. - 1975-76

Attorney Advisor, U.S. Department of the Interior,
Washington, D.C. - 1974-75

Staff Assistant to the President, The White House,
Washington, D.C. - 1974

Employment record—Continued

Senior Trial Attorney, Federal Trade Commission, Washington, D.C. - 1973-74

Public Opinion Analyst, Committee for Re-election of the President, Washington, D.C. - 1972

Supervisory Trial Attorney, U.S. Department of Justice, Washington, D.C. - 1969-72

Assistant Manager, Consumer Research, American Motors Corporation, Detroit, Michigan - 1968-69

Military service: Describe any military service not listed above, including dates, rank, and type of discharge.

None

Honors and awards: List below all scholarships, fellowships, honorary degrees, military medals, honorary society memberships, and any other special recognitions for outstanding service or achievement.

Law School -- Cum laude Degree

-- Moot Court Board

-- Scholarship

Memberships: List below all memberships and offices held in professional, fraternal, business, scholarly, civic, charitable and other organizations.

Organization	Dates	Office held (if any)
Michigan State Bar Association	1969 to Present	-
District of Columbia Bar Assoc.	1972 to Present	-
Federal Bar Association	1971 to Present	-
American Bar Association	1971 - 1981	-
National Lawyers Club	1979 - 1981	-
U.S. Ski Association (SkiPAC)	1979 - 1980	Treasurer
Peninsular Society (Alpha Delta Phi social fraternity)	1960 to Present	-
Delta Theta Phi Professional fraternity	1965 - 1969	

Published writings:

List the titles, publishers and dates of any books, articles, or reports you have written.

During 1978-80 I submitted monthly columns entitled, "Legislative and Regulatory Report" and "Washington Report" along with news releases and short articles to newsletters and specialized publications with an interest in land use issues. Because of the myriad of publications in which such columns appeared it would be exceptionally difficult to provide a listing of where items appeared.

Future employment relationships:

1. **Will you sever all connections with your present employer, business firm, association or organization if you are confirmed by the Senate?**

I am currently employed by the Department of Energy. All previous connections have been severed.

2. **Do you have any plans after completing government service to resume employment, affiliation or practice with your current or any previous employer, business firm, association or organization?**

I have no such plans.

3. **Has a commitment for employment after you leave government been made to you by anyone? Have you made any such commitment?**

No.

4. **(a) If you have been appointed for a fixed term, do you expect to serve the full term?**

Not applicable.

Future employment relationships—Continued

(b) If you have been appointed for an indefinite term, are there any known limitations on your willingness or ability to serve for the foreseeable future?

No.

Financial statement

1. Attach a copy of your Executive Personnel Financial Disclosure Report (SF 278).

2. List sources, amounts and dates of all anticipated receipts from deferred income arrangements, stock options, uncompleted contracts and other future benefits which you expect to derive from previous business relationships, professional services and firm memberships or from former employers, clients, and customers. Amounts should be indicated by the categories established for reporting income on Form SF 278, Schedule A.

None.

3. Are you currently a party to any legal action? If so, describe its nature and status.

No.

4. Have you ever declared bankruptcy? If so, describe the circumstances.

No.

5. Have you filed a Federal income tax return for each of the last 10 years? If not, please explain.

Yes.

6. Has the Internal Revenue Service ever audited your Federal tax return? If so, what resulted from the audit?

Yes. Approved as originally submitted.

Potential conflicts of interest:

1. List any investments, obligations, liabilities, or other relationships which might involve potential conflicts of interest with the position to which you have been nominated.

None.

2. Describe any business relationship, dealing or financial transaction (other than taxpaying) that you have had during the last 10 years with the Federal Government, whether for yourself or relatives, on behalf of a client, or acting as an agent, which might in any way constitute or result in a possible conflict of interest with the position to which you have been nominated.

None.

3. Describe any lobbying activity which you have performed during the past 10 years with respect to legislative or administrative actions at the Federal, State or local level.

While in private practice (1978-1980) I performed legislative advocacy and representation on various national resource issues. Principal among these were the Archaeological Resource Protection Act and RARE II bills. I registered and reported this activity with the appropriate offices of the House and Senate on behalf of my law firm.

4. Have you been informed of the conflict of interest laws and regulations applicable to the position to which you have been nominated?

Yes.

Potential conflicts of interest—Continued

5. Explain how you will resolve any potential conflict of interest that may be disclosed by your responses to this form and the attachments thereto. Attach a statement of the appropriate agency ethics official explaining the applicable laws or regulations, any potential conflicts, and the action required to resolve such conflicts.

I will undertake not to participate as a government official in any matters in which my former law firm is involved. Further, I will not participate in any particular matter, the outcome of which could have a direct and predictable effect on either the National Outdoor Coalition or the Cellulose Manufacturers Association.

6. Explain how you will resolve any potential conflicts of interest that may arise in the future if you are confirmed for the position for which you have been nominated.

Same as #5 above.

Public disclosure: Do you have any objections to this form and the attachments thereto being made public?

No.

AFFIDAVIT

I, Theodore J. Garrish, being duly sworn, hereby state that I have read the foregoing Statement for Completion by Presidential Nominees, including all attachments thereto, and that the information provided therein is, to the best of my knowledge and belief, current, accurate, and complete.

(Signature of Nominee)

Subscribed and sworn to before me this 5th day of April, 1985

Notary Public

My Commission Expires July 31, 1989

Form approved by the Committee February 5, 1985.

U.S. GOVERNMENT PRINTING OFFICE 1985—43-095

United States of America
Office of Government Ethics

Office of Personnel Management
Washington, D.C. 20415

APR 16 1985

Honorable James A. McClure
Chairman, Committee on Energy and
Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

In accordance with the Ethics in Government Act of 1978, I enclose a copy of the financial disclosure report filed by Theodore J. Garrish, who has been nominated by President Reagan for the position of Assistant Secretary for Congressional, Intergovernmental, and Public Affairs, Department of Energy.

We have reviewed the report and have also obtained advice from the Department of Energy concerning any possible conflict in light of the Department's functions and the nominee's proposed duties. Based thereon, we believe that Mr. Garrish is in compliance with applicable laws and regulations governing conflicts of interest.

Sincerely,

David H. Martin
Director

Enclosure

FINANCIAL DISCLOSURE REPORT

Reporting Status (Check Appropriate Box)

[ ] Incumbent [X] New Entrant, Nominee, or Candidate [ ] Termination Report

NOTE
All schedules must be filled. Enter "None" in areas or across schedules where appropriate.

Agency Use Only | OGE Use Only

Date of Filing (Month, Day, Year): MAR 29 1985

Reporting Individual's Name	Last Name: GARRISH	First Name and Middle Initial: THEODORE J.		
Position for Which Filing	Title of Position: ASSISTANT SECRETARY FOR CONGRESSIONAL, INTERGOVERNMENTAL & PA	Department or Agency (If Applicable): U.S. DEPARTMENT OF ENERGY	Date of Appointment, Candidacy, Election or Nomination (Mo., Day, Yr.)	Termination Date (If Applicable) (Month, Day, Year)
Location of Present Office	Address (Number, Street, City, State and Zip Code): 1000 INDEPENDENCE AVENUE, SW / WASHINGTON, DC 20585	Room Number: 7B138	Telephone No. (Include Area Code): (202) 252-5450	

Presidential Nominees Subject to Senate Confirmation	Name of Congressional Committee Considering Nomination: SENATE ENERGY AND NATURAL RESOURCES	Do You Intend to Create a Qualified Diversified Trust? [ ] Yes not necessary [X] No
Position(s) Held With the Federal Government During the Preceding 12 Months (If Not Same as Above)	Name of Position and Dates Held: GENERAL COUNSEL - U.S. DEPARTMENT OF ENERGY - MAY 10, 1983 to PRESENT	

Certification

I CERTIFY that the statements I have made on this form and all attached schedules are true, complete and correct to the best of my knowledge and belief.

Signature of Reporting Individual: *T Garrish* — Date: 3-8-85

Agency Ethics Official's Opinion

The information contained in this report discloses no conflict of interest under applicable laws and regulations.

Signature of Designated Agency Ethics Official/Reviewing Official: *Paper D. Falkenberg* — Date: 4/1/85

Office of Government Ethics Use Only ➤

Comments of Reviewing Official (If additional space is required, use the reverse side of this sheet)

Mr. Garrish has undertaken, for the duration of his service with the Department, not to participate as a Government employee in any particular matter in which his former law firm (Deaver, Saunders, Strother, and Oberaden) is involved. Further, he has agreed not to participate as a Government employee in any particular matter the outcome of which could have a direct and predictable effect on the Cellulose Manufacturers Association, as long as that organization still owes fees for legal services performed by Mr. Garrish while a member of his former law firm. PDJ 4/1/85

(Check box if comments are continued on the reverse side) [ ]

INCOME AND INTERESTS IN PROPERTY

This schedule is applicable in the case of all reporting individuals

	Yes	No
... your spouse, or dependent child receive income from, or have a ... interest in a trust?		X
If yes, have you reported the income from the trust?	N/A	
If yes, have you reported the assets of the trust?	N/A	
Is the trust an "excepted trust" N/A or "qualified trust"?	N/A	

	Yes	No
Are there any interests in property, purchases, sales, or exchanges, or liabilities of a spouse or dependent child which you have not reported?	X	
If "Yes," do you certify to all of the following? 1. They represent solely your spouse's or dependent child's financial interest or responsibility. 2. They are not, in any way, past or present, derived from your income, assets, or activities. 3. You neither derive, nor expect to derive, any financial or economic benefit from them, and 4. You do not have knowledge as to the composition of such interest or liabilities.		X

Page Number -2- Schedule A

Reporting Individual's Name: THEODORE J. GARRISH

Agency Use Only

Date of Filing (Month, Day, Year): MAR 29 1985

Identification	Income: Type of Income (✓)							Income: Category of Amount or Value (✓)										Interests in Property: Valuation of Assets (✓)						
	Dividends	Rent	Interest	Capital Gains	Executor Trust	Qualified Trust	Other (Specify)	None (or less than $201)	$201 - $1,000	$1,001 - $2,500	$2,501 - $5,000	$5,001 - $15,000	$15,001 - $50,000	$50,001 - $100,000	Over $100,000	Actual Amount Only if "Other"	Date (Mo., Day, Yr.) Only if	Valuation Method	$1,001 - $5,000	$5,001 - $15,000	$15,001 - $50,000	$50,001 - $100,000	$100,001 - $250,000	Over $250,000
1607 ASSOCIATES (D.C. partnership owning commercial real estate at 1607 New Hampshire)		X											X			(GROSS; ~~NET LOSS~~)		A					X	
CELLULOSE MANUFACTURES ASSOCIATION IS A FORMER CLIENT FROM WHOM FEES ARE STILL OWING.																		A		X				

SF 278 Financial Disclosure Report
(Rev. 8/87)

PURCHASES, SALES, AND EXCHANGES

This schedule is applicable only in the case of annual and termination reports.

Page Number -3- Schedule

Reporting Individual's Name
THEODORE J. GARRISH

Date of Filing (Month, Day, Year)
MAR 29 1985

Report Applicable Transactions, Even if Also Reported on Schedule A

S or DC	Identification of Property (real and personal)	Type of Transaction			Date (Month, Day, Year)		Category of Amount or Value ( )					
		Purchase	Sale	Exchange	Purchase	Sale or Exchange	$1,001 to $15,000	$15,001 to $50,000	$50,001 to $100,000	$100,001 to $250,000	$250,001 to $500,000	Over $500,000
	NONE											

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GIFTS AND REIMBURSEMENTS

This schedule is applicable only in the case of annual and termination reports.

Page Number	-4-	Schedule C
Reporting Individual's Name	THEODORE J. GARRISH	
Agency Use Only		
Date of Filing (Month, Day, Year)	MAR 29 1985	

I Lodging, Transportation, Food and Entertainment—List each source totaling $250 or more in value		Value
NONE		

II – All Other Gifts—List each source totaling $100 or more in value		Value
NONE		

III Reimbursements—List each source totaling $250 or more in value		
Reagan Bush Campaign Committee 440 1st Street, N.W. Washington, D.C. 20001	The only reimbursement for 1984 received (not reportable on this form).	

Financial Disclosure Report (Title II)

This schedule, except as noted for the third section, is applicable in the case of all reporting individuals.

Reporting Individual's Name: THEODORE J. GARRISH

Date of Filing (Month, Day, Year): MAR 29 1985

Page Number: -5-

Schedule: D

LIABILITIES

Name and Address of Creditor	Type of Liability (e.g., promissory note, margin account)	Category of Amount or Value ($10,001 to)	($15,001 to)	($50,001 to)	($100,001 to)	(Over)
MIDLAND INSURANCE, CHICAGO, ILLINOIS	PROMISSORY NOTE FROM 1607 ASSOCIATES - SEPT 1980 12%, 10 YEARS. TOTAL LIABILITY OF ALL PARTNERS, $750,000; MY SHARE, $107,111				X	
FIRST AMERICAN NATIONAL BANK, WASHINGTON, DC (Line of Credit for 1607 Associates)	2 pts. ABOVE PRIME - 1 YEAR REVOLVING. TOTAL LIABILITY OF ALL PARTNERS, $75,000; MY SHARE,			X		
KEY CAPITAL CORPORATION, 57 RIVER STREET WELLESLEY HILLS, MASSACHUSETTS 02181	$5,355, ORGINATED JANUARY 1980 ½ INTEREST IN $50,000 MORTAGE ON SAILING VESSEL. 1½ pt above prime - 15 years; March, 1985. RHG 4/1/85			X		

POSITIONS HELD

1607 ASSOCIATES 1607 NEW HAMPSHIRE, WASHINGTON, D.C.	REAL ESTATE PARTNERSHIP	PARTNER	1/80	PRESENT
ANNIVERSARY BALL COMMITTEE, WASHINGTON, DC	D.C. NONPROFIT	DIRECTOR	9/83	PRESENT

COMPENSATION IN EXCESS OF $5,000 PAID BY ONE SOURCE

This section is applicable only in the case of nominees and new entrants.

~~NOT APPLICABLE~~ None RHG 4/1/85	

RELATIONS WITH OTHER EMPLOYERS

None		

Department of Energy
Washington, D.C. 20585

April 22, 1985

Honorable James A. McClure
Chairman
Committee on Energy and
Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

Please be advised that, pursuant to section 201(b) of the Ethics in Government Act of 1978, as amended, I have informed Ralph D. Goldenberg, Assistant General Counsel for General Law, that the information required by section 202(a)(1)(A) with respect to income and honoraria is current as of April 22, 1985.

Sincerely yours,

Theodore J. Garrish
Acting Assistant Secretary
Congressional, Intergovernmental
and Public Affairs

District of Columbia ss

Subscribed and sworn to before me this 22nd day of April, 1985.

Notary Public

My Commission Expires July 31, 1989

cc: Honorable J. Bennett Johnston

DOE F 1325.8
(7-79)

U.S. DEPARTMENT OF ENERGY

memorandum

DATE APR 4 1985

REPLY TO ATTN OF GC-44

SUBJECT Statement of Agency Ethics Official for Senate Committee

TO Theodore J. Garrish
Acting Assistant Secretary for Congressional,
Intergovernmental, and Public Affairs

This memorandum is intended to serve as a statement from the designated agency ethics official for this Department, as required by question 5, page 6, of the Statement for Completion by Presidential Nominees that you are submitting to the United States Senate Committee on Energy and Natural Resources in connection with your nomination for the position of Assistant Secretary for Congressional, Intergovernmental, and Public Affairs. I have reviewed your Standard Form 278 (Financial Disclosure Report) dated March 8, 1985, and have certified that the information contained therein discloses no conflict of interest under applicable laws and regulations. 1/

As a supervisory employee of the Department, you are prohibited by section 602(a) of the DOE Organization Act (Pub. L. 95-91) from knowingly receiving compensation from, holding any official relation with, or having any pecuniary interest in any energy concern. The term "energy concern" is defined in section 601(b) of the Act as any entity "significantly engaged in the business" of any of a variety of activities related to energy production, distribution, sale, or research and development, or any entity significantly engaged in such research and development pursuant to a DOE-funded program irrespective of whether it otherwise engages in such business. The term also includes any entity holding an interest in property from which an energy resource is commercially produced or obtained.

In addition, section 208, title 18, United States Code, prohibits you from participating personally and substantially, as a Government employee, in any particular matter in which, to your knowledge, you have or your spouse, minor child, partner, organization in which you are serving as officer, director, trustee, partner, or employee, or any person or organization with whom you are negotiating or have any arrangement concerning prospective employment has, a financial interest.

1/ Section 201(b) of the Ethics in Government Act (Pub. L. 95-521) requires the income and honoraria information on your form to be updated within five days before the date of the Committee hearing to consider your nomination.

Accordingly, you should avoid participation in any particular matter the outcome of which could have a direct and predictable effect on any such financial interests.

You indicated on Schedule A of your Standard Form 278 that fees are still owing from the Cellulose Manufacturers' Association, a former client. I understand that these fees are owed to your former law firm (now known as Deane, Snowdon, Shutler and Gherardi) for services rendered by you, but that your own account with the law firm has been settled. To avoid any suggestion of conflict of interest, you have undertaken, for the duration of your service with the Department, not to participate, as a Government employee, in any particular matter in which the law firm is involved. Further, you have agreed not to participate, as a Government employee, in any particular matter the outcome of which could have a direct and predictable effect on the Cellulose Manufacturers' Association, so long as that organization still owes fees to your former law firm for your legal services.

Please let me know if I can be of further assistance.

Ralph D. Goldenberg

Ralph D. Goldenberg
Assistant General Counsel
for General Law

U.S. Department of Energy
Assistant Secretary for
Congressional, Intergovernmental
and Public Affairs
Office of Public Affairs
Washington, D.C. 20585
202/252-5644

BIOGRAPHY

HELMUT A. MERKLEIN

Dr. H. A. Merklein was named Administrator of the Energy Information Administration, the independent statistical and analytical agency within the U.S. Department of Energy (DOE), by recess appointment on December 31, 1984. In this position, he is responsible for the Department's statistical information system which includes management of energy data collection, processing and analysis, and publication of information on energy reserves, production, prices and consumption.

Prior to his present appointment, Dr. Merklein served as the Assistant Secretary for International Affairs and Energy Emergencies, where he was the principal international policy advisor to the Secretary of Energy and spokesman for the Secretary on matters of international import. In addition, he also served as the Secretary's principal advisor for energy emergency policy, planning and operations.

Before joining DOE on November 28, 1983, Dr. Merklein was professor of petroleum engineering at Texas A&M University. Earlier academic positions include a one-year visiting professorship at the Universite de Nice, France, and 12 years at the University of Dallas, where, in his last two years, he was Dean of the Graduate School of Management.

Dr. Merklein spent six years (1959-1965) as a petroleum engineer with Getty Oil Company, and three years (1965-1968) doing reservoir engineering, reserve evaluations, and international petroleum consulting for Core Laboratories, Inc.

An alumnus of the University of Oklahoma, Dr. Merklein received his B.S. degree in petroleum engineering in 1959; an MBA degree from the University of Dallas in 1968, where he was the recipient of the Wall Street Journal Student Achievement Award; and a Ph.D. in economics from Texas A&M University in 1970, under the auspices of a National Science Foundation fellowship.

He is the author of 3 books and more than 100 published articles, most of them on the subject of energy economics and international finance.

Dr. Merklein, 49, was born in Indonesia, spent his childhood in Germany, and has travelled throughout the world on lecturing and consulting assignments. He speaks French and German fluently and has a working knowledge of Spanish.

Dr. Merklein is married and has two sons.

January 1985

UNITED STATES SENATE
COMMITTEE ON ENERGY AND NATURAL RESOURCES
STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

Name: Merklein (LAST) Helmut (FIRST) Adolf (OTHER)

Position to which nominated: Administrator, Energy Information Administration, DOE

Date of nomination: January 3, 1985

Date of birth: 26 (DAY) May (MONTH) 1935 (YEAR)

Place of birth: Waringin-Tiga, Sumatra, Indonesia

Marital status: Married

Full name of spouse: Brigitte (NMI) Artopoeus Merklein

Name and ages of children: Thomas (NMI) (24)
Patrick (NMI) (19)

Education:

Institution	Dates attended	Degrees received	Dates of degrees
Gymnasium Hohenbaden	1945-1954	Graduation - High School	
Montanistische Hochschule	1954-1957	Vordiplom	1957
University of Oklahoma	1957-1959	B.S. Petr. Engrg	1959
University of Dallas	1966-1968	MBA	1968
Texas A&M University	1968-1970	Ph.D. Economics	1970

Employment record: List below all positions held since college, including the title and description of job, name of employer, location, and dates.

See attached Employment Record

Employment record—Continued

Military service: Describe any military service not listed above, including dates, rank, and type of discharge.

None

Honors and awards: List below all scholarships, fellowships, honorary degrees, military medals, honorary society memberships, and any other special recognitions for outstanding service or achievement.

Wall Street Journal Student Achievement Award

National Science Foundation Fellowship

Memberships: List below all memberships and offices held in professional, fraternal, business, scholarly, civic, charitable and other organizations.

Organization	Dates	Office held (if any)
American Economic Association	1970 - present	
Society of Petroleum Engineers	1959 - present	

Published writings:

List the titles, publishers and dates of any books, articles, or reports you have written.

See attached List of Publications

Future employment relationships:

1. Will you sever all connections with your present employer, business firm, association or organization if you are confirmed by the Senate?

DOE has been my employer for the last 16 months. I severed all connections with previous employers.

2. Do you have any plans after completing government service to resume employment, affiliation or practice with your current or any previous employer, business firm, association or organization?

No

3. Has a commitment for employment after you leave government been made to you by anyone? Have you made any such commitment?

No

4. (a) If you have been appointed for a fixed term, do you expect to serve the full term?

Not applicable

Future employment relationships—Continued

(b) If you have been appointed for an indefinite term, are there any known limitations on your willingness or ability to serve for the foreseeable future?

No

Financial statement:

1. Attach a copy of your Executive Personnel Financial Disclosure Report (SF 278).

2. List sources, amounts and dates of all anticipated receipts from deferred income arrangements, stock options, uncompleted contracts and other future benefits which you expect to derive from previous business relationships, professional services and firm memberships or from former employers, clients, and customers. Amounts should be indicated by the categories established for reporting income on Form SF 278, Schedule A.

None

3. Are you currently a party to any legal action? If so, describe its nature and status.

No

4. Have you ever declared bankruptcy? If so, describe the circumstances.

No

5. Have you filed a Federal income tax return for each of the last 10 years? If not, please explain.

Yes

6. Has the Internal Revenue Service ever audited your Federal tax return? If so, what resulted from the audit?

Yes. For the tax year 1972, returns were audited with respect to deductibility of educational expenses. IRS accepted my claim and no changes were made in my tax liability.

Potential conflicts of interest:

1. List any investments, obligations, liabilities, or other relationships which might involve potential conflicts of interest with the position to which you have been nominated.

None

2. Describe any business relationship, dealing or financial transaction (other than taxpaying) that you have had during the last 10 years with the Federal Government, whether for yourself or relatives, on behalf of a client, or acting as an agent, which might in any way constitute or result in a possible conflict of interest with the position to which you have been nominated.

None

3. Describe any lobbying activity which you have performed during the past 10 years with respect to legislative or administrative actions at the Federal, State or local level.

None

4. Have you been informed of the conflict of interest laws and regulations applicable to the position to which you have been nominated?

Yes

Potential conflicts of interest—Continued

5. Explain how you will resolve any potential conflict of interest that may be disclosed by your responses to this form and the attachments thereto. Attach a statement of the appropriate agency ethics official explaining the applicable laws or regulations, any potential conflicts, and the action required to resolve such conflicts.

See answer to Question 6

6. Explain how you will resolve any potential conflicts of interest that may arise in the future if you are confirmed for the position for which you have been nominated.

I will avoid participation in any particular matter the outcome of which could have a direct and predictable effect on any entity in which I have a financial interest. I will also continue to seek and comply with the advice of the Office of the General Counsel of the Department of Energy.

Public disclosure: Do you have any objections to this form and the attachments thereto being made public?

No

AFFIDAVIT

DISTRICT OF COLUMBIA) ss

I, H.A. Merklein, being duly sworn, hereby state that I have read the foregoing Statement for Completion by Presidential Nominees, including all attachments thereto, and that the information provided therein is, to the best of my knowledge and belief, current, accurate, and complete.

H. A. Merklein
(Signature of Nominee)

Subscribed and sworn to before me this 22nd day of March, 1985

Notary Public

My Commission Expires November 14, 1989

Form approved by the Committee February 5, 1985.

U.S. GOVERNMENT PRINTING OFFICE 1985—43-095

EMPLOYMENT RECORD:

DATES	EMPLOYER & LOCATION	TITLE	DESCRIPTION
11/83 - present	U.S. Dept. of Energy 1000 Independence Ave, SW Washington, DC 20585	Asst. Secretary/ Administrator	International spokesman for DOE
9/82 - 11/83	Texas A&M University Petro. Engrg. Dept. College Station, Texas	Professor	Teaching and research
9/70 - 8/82*	University of Dallas Graduate School of Management Irving, Texas	Professor and Dean	Teaching and Administration
*10/72 - 6/73	One-year leave University of Nice Nice, France	Professor	Teaching
9/68 - 8/70	Student at Texas A&M University		
9/65 - 8/68	Core Laboratories 7501 Stemmons Freeway Dallas, Texas	Reservoir Engineer	Petroleum consulting
11/59 - 8/65	Tidewater Oil Company (now Getty Oil Co.) Hobbs, N.M. New Hope, TX Kilgore, TX	Production Engineer	Oil production
2/59 - 10/59	A&B Wireline Co. Cutoff, LA	Field Operator	Oil production

Dr. H. A. Merklein

Self-Employed Services

author, book on energy, for Fisher Institute; University of Dallas, Irving, Texas; 1980

consulting services for Thompson & Knight; University of Dallas, Irving, Texas; 1978-1981

consulting services for Lone Star Steel Co.; University of Dallas, Irving, Texas; 1981

consulting services for Harry Lucas & Associates; University of Dallas, Irving, Texas; 1981

consulting services for The Western Company; University of Dallas, Irving, Texas; 1981-1982

consulting services for American Oil & Gas Ltd.; University of Dallas, Irving, Texas - Texas A&M University, College Station, Texas; 1981-1983

LIST OF PUBLICATIONS

H. A. Merklein

Books:

Macroeconomics, Wadsworth Publishing Co., Inc., Belmont, California, 1972.

One chapter entitled "The Domestic and International Impact of Current Legislative Energy Proposals" in Exploration and Economics of the Petroleum Industry, Vol. 13; Matthew Bender & Co., New York, 1975; pp. 175-183.

Energy Economics, co-authored with W. C. Hardy, Gulf Publishing Co., Inc., Houston, Texas, 1977 .

Chapter 14, entitled "Indexation of Crude Oil Prices" in: U.S. and World Energy Resources: Prospects and Priorities; the International Research Center for Energy and Economic Development; Boulder, Colorado; 1977; pp. 165-180.

One chapter entitled "Domestic and International Repercussions of the National Energy Plan" in Exploration and Economics of the Petroleum Industry, Vol. 16; Matthew Bender & Co., New York, 1978; pp. 289-305.

One chapter entitled "Oil and the International Monetary System" in International Essays for Business Decision Makers, Vol. III; Amacom, a Division of American Management Associations, 1978; pp. 84-95

Chapter 5, in co-authorship with Rep. J. M. Collins, M.C., entitled "An Assessment of the Supply Effects of New Natural Gas Deregulation" in Energy Perspectives, The Heritage Foundation, Washington, D.C., 1978; pp. 37-48.

Those Gasoline Lines and How They Got There, in co-authorship with W. P. Murchison; Fisher Institute, Dallas; 1980.

Natural Gas: Options and Opportunities, Chapter 10: Energy Supply Scenarios; The Oil Daily, New York, N.Y.; January 1983.

Articles:

"An Investment Model for a Survival Conscious Oil Drilling Contractor." Co-authored with R. G. Thompson (1971). Presented at the 7th Annual Meeting of the Marine Technology Society, August 16-18, 1971, Washington, D. C.

"U. S. Hydrocarbon Finding Cost." Co-authored with F. N. Howell (1971). Presented at the 46th Annual Fall Meeting of SPE, October 3-7, 1971, New Orleans, Louisiana.

Presented again upon invitation at the Eastern Regional Meeting of SPE, November 4-6, 1971, Charleston, West Virginia.

"The Cost of Quitting a Stripper Well." Presented at the 1972 Rocky Mountain Regional Meeting of SPE, April 10-12, 1972, Denver, Colorado.

"Joint Association Survey Aids in U. S. Finding Cost Study." Co-authored with F. N. Howell, World Oil, October, 1972, pp. 91-101.

"Petroleum Economics--A Domestic Model," 47th Annual Fall Meeting of the Society of Petroleum Engineers, San Antonio, Texas, October 8-11, 1972. SPE Paper #4132.

"Aspects Réels et Monétaires de la Crise d'Hydrocarbures." Presented at the Colloque sur les Hydrocarbures Gaseux et le Développement des Pays Producteurs. University of Dijon, France, May 17-19, 1973.

"La Crise Energétique des Etats Unis." Revue d'Economie et de Gestion; University of Nice, France, June 1973, pp. 57-67.

"La Crise de l'Energie aux Etats Unis, et ses Implications sur la Politique des Compagnies Pétrolières en Amérique du Sud." Co-authored with X. Boisselier. Presented at the 5th Colloque Franco-Latino-Américain in Tours, France, September 1973.

"What it Costs to Find Hydrocarbons in the U. S." Co-authored with F. N. Howell. World Oil, October 1973, pp. 75-79.

"The Energy Crisis: Some Causes and Effects."
Part 1: International Monetary Considerations; World Oil, February 1, 1974; pp. 47-56.
Part 2: A Look at the Domestic Petroleum Situation; World Oil, February 15, 1974; pp. 33-42.
Part 3: A Look at International Oil--The OPEC Cartel and Windfall Profits; World Oil, March 1, 1974; pp. 47-52.
Part 4: The Major Inescapable Effect of Declining U. S. Oil Resources: A Drastic Reduction in Living Standards. Here is Why; World Oil, April 1, 1974; pp. 91-94.

"International Economics Integration: A Book Review." (P. Robson, Penguin Modern Economics Readings, 1972) The Financial Review, 1973 edition.

"Languages and Business." ADFL Bulletin, May 1974, pp. 7-9.

"Career Perceptions of Foreign Language Majors." Co-authored with B. W. Frenk, ADFL Bulletin, May 1974, pp. 9-12.

"Fossil Fuel Alternatives." Presented at the Western Economic Association Annual Conference, June 9-11, 1974; Las Vegas, Nevada.

Reprinted under the title, "Alternate Fossil Fuels Won't Add Much to U. S. Energy Supply" in World Oil, August 1, 1974, pp. 27-32.

"International Business Without Foreign Languages?" Accent on ACTFL, September/November 1974, pp. 10 & 11.

Reprinted in: Alberta Modern Language Journal, Winter 1974-75, pp. 30-34.

"Energy and International Monetary Problems." Presented at the 49th Annual Fall Meeting of the Society of Petroleum Engineers, Houston, Texas, October 6-9, 1974, SPE Paper #5076.

"How Higher Oil Prices are Affecting U. S. Inflation." World Oil, ember 1974, pp. 58-60.

Reprinted under the title, "The Inflationary Impact of Rising Crude Oil Prices," in The Arab Economist, September 1974, pp. 16-19.

Reprinted in: Panel Discussions before the Committee of Ways and Means, House of Representatives, Ninety-Fourth Congress, March 3-17, 1975, pp. 1092-1095.

"An Economist Looks at the Summit," an editorial in The Dallas Morning News, September 13, 1974, Section D.

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All publications in Journal of Petroleum Technology, months and page numbers as shown:

April 1974; p. 412; Prices--Drilling--Discoveries.

May 1974; p. 520; Examples of Free-Market Solutions to Energy "Crisis."

June 1974; p. 622; Profits are Essential for a Solution to the Energy "Crisis."

July 1974; p. 750; Relative Costs of Solutions to Energy "Crisis"--Free Market vs. Controls and Imports.

August 1974; p. 866; U. S. Supply.

September 1974; p. 1012; Prices--Profits--And the Search for Oil.

Reprinted in: Panel Discussions before the Committee of Ways and Means, Ninety-Fourth Congress, March 3-17, 1975, p. 1211.

October 1974; p. 1118; U. S. Supplies of Oil and Gas Grow Shorter.

November 1974; p. 1244; Higher Prices Increase Oil and Gas Activity.

Reprinted in: Panel Discussions before the Committee of Ways and Means, Ninety-Fourth Congress, March 3-17, 1975, p. 1352.

December 1974; p. 1390; Petroleum Profits Are Not Unique.

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January 1975; p. 48; Price Regulations Distort Energy Market.

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March 1975; p. 304; Profits--Investments--Energy.

April 1975; p. 456; Petroleum Industry Investments Exceed Income.

May 1975; p. 602; 1974 Petroleum Profits Exceeded by Other Leading Industries.

June 1975; p. 716; Effects of Increased Drilling Efforts on Future Production Rates.

July 1975; p. 850; Energy Crisis No Help to Oil Investors.

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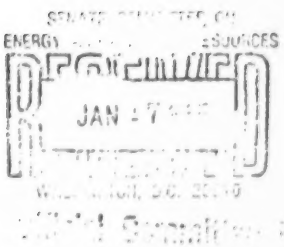
United States of America
Office of Government Ethics

Office of Personnel Management
Washington, D.C. 20415



Honorable James A. McClure
Chairman, Committee on Energy
and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

In accordance with the Ethics in Government Act of 1978, I enclose a copy of the financial disclosure report filed by Helmut A. Merklein, who has been nominated by President Reagan for the position of Administrator, Energy Information Administration, Department of Energy.

We have reviewed the report and have also obtained advice from the Department of Energy concerning any possible conflict in light of the Department's functions and the nominee's proposed duties. Based thereon, we believe that Mr. Merklein is in compliance with applicable laws and regulations governing conflicts of interest.

Sincerely,

David H. Martin
Director

Enclosure

SF 278 (Rev. 6/91)
5 CFR Chapter XVI
U.S. Office of Personnel Management

FINANCIAL DISCLOSURE REPORT

Reporting Status (Check Appropriate Box)

☐ Incumbent ☒ New Entrant, Nominee, or Candidate ☐ Termination Report

NOTE: All schedules must be filled. Enter "None" or mark across schedules where appropriate.

Date Filed (Month, Day, Year): JAN 9 1985

	Last Name	First Name and Middle Initial
Reporting Individual's Name	Merklein	Helmut A.
Position for Which Filing	Title of Position: Administrator, Energy Information Administration	Department or Agency (If Applicable): Department of Energy
Location of Present Office	Address (Number, Street, City, State and Zip Code): 1000 Independence Avenue, SW, Washington, DC 20585	Room Number: 7B-098
		Telephone No. (Include Area Code): 202 252-4662

Presidential Nominees Subject to Senate Confirmation

Name of Congressional Committee Considering Nomination: Senate Energy and Natural Resources Committee

Do You intend to Create a Qualified Diversified Trust? ☐ Yes ☒ No

Position(s) Held With the Federal Government During the Preceding 12 Months (If Not Same as Above)

Title of Position(s) and Date(s) Held: Assistant Secretary, International Affairs and Energy Emergencies - November 1983 to present

Certification

I CERTIFY that the statements I have made on the form and all attached schedules are true, complete and correct to the best of my knowledge and belief.

Signature of Reporting Individual: Helmut A. Merklein

Date (Month, Day, Year): December 17, 1984

Agency Ethics Official's Opinion

The information contained in this report discloses no conflict of interest under applicable laws and regulations.

Signature of Designated Agency Ethics Official Reviewing Official: Peggy D. Greenberg

Date (Month, Day, Year): 1/9/85

Office of Government Ethics Use Only

Signature:

Date (Month, Day, Year):

Comments of Reviewing Officials (If additional space is required, use the reverse side of this sheet)

Dr. Merklein advises that this report is current through January 9, 1985.

(Check box if comments are continued on the reverse side) ☐

SF 278 (Rev. 6/91)

INCOME AND INTERESTS IN PROPERTY

This schedule is applicable to the same of all reporting individuals

	Yes	No
Do you, your spouse, or dependent child receive income from, or have a beneficial interest in a trust?		X
If "yes", have you reported the income from the trust?		
If "yes", have you reported the assets of the trust?		
If "yes", is this trust an "excepted" trust?		
or "qualified" trust?		

	Yes	No
Are there any interests in property, purchases, sales, or exchanges, or liabilities of a spouse or dependent child which you have not reported?		X
If "Yes," do you certify to all of the following? 1. They represent solely your spouse's or dependent child's financial interest or responsibility; 2. They are not in any way, past or present, derived from your income, assets, or activities; 3. You neither derive, nor expect to derive, any financial or economic benefit from them; and 4. You do not have knowledge as to the composition of such interest or liabilities.		

Page Number 2 — Schedule A

Reporting Individual's Name: Helmut A. Merklein

Agency Use Only

Date of Filing (Month, Day, Year): JAN 9 1985

Identification	Income: Type of Income (✓)							Income: Category of Amount or Value (✓)								Interests in Property: Value of Assets (✓)					
	Dividends	Rent	Interest	Capital Gains	Excepted Trust	Qualified Trust	Other (Specify)	Tax Only	$1,001 - $2,500	$2,501 - $5,000	$5,001 - $15,000	$15,001 - $50,000	$50,001 - $100,000	$100,001 - $1,000,000	Over $1,000,000	Actual Amount (Only if "Over" Checked)	Date (Mo., Day, Yr.) (Only if Honoraria)	$1,001 - $15,000	$15,001 - $50,000	$50,001 - $100,000	$100,001 - $1,000,000	Over $1,000,000
Texas A&M University College Station, Texas 77843							1983 Salary									52,815						
Allied Bank, 800 W. Airport Pkwy* Irving, Texas 75062			X						X											X		
Merrill Lynch, P.O. Box 11063* Church Street Station, NY, NY (Ready Assets Acct)			X							X								H		X		
J The National Bank of Washington 4340 Connecticut Ave., NW			X								X							H		X		
J The National Bank of Washington 4340 Connecticut Ave., NW			X								X											
Alma Spring Creek #3 Joint Venture**				X													10/21/74	C		X		
Lake Lavon East Joint Venture								X														
Reversionary Interests in oil & gas production granted by American Oil & Gas, Ltd., (leases located in OK & KY) - divested 10/20/83								X										H		X		
Retirement Accounts: (No income)																		H		X		
1. Teachers Insurance & Annuity Assn																		H	X			
2. College Retirement Equity Fund																						
3. Security Benefit Life Ins. Co.																						
4. DOE Retirement Fund																						

* Account closed and funds transferred to National Bank of Washington, Washington, D.C.

** Sold 10/19/83, no interest left

SF 278– Financial Disclosure Report
(Rev. 6/91)

PURCHASES, SALES, AND EXCHANGES

This schedule is applicable only in the case of annual and termination reports.

Page Number	3	Schedule B
Reporting Individual's Name: Helmut A. Merklein		
Agency Use Only Date of Event (Month, Day, Year): JAN 9 1985		

Report Applicable Transactions, Even If Also Reported on Schedule A

S or DC	Identification of Property (real and personal)	Type of Transaction: Purchase	Sale	Exchange	Date (Month, Day, Year): Purchase	Sale or Exchange	Category of Amount or Value ($): $1,001 to $15,000	$15,001 to $50,000	$50,001 to $100,000	$100,001 to $250,000	$250,001 to $500,000	Over $500,000
	Not applicable											

SF 278—Financial Disclosure Report
(Rev. 9/81)

GIFTS AND REIMBURSEMENTS

This schedule is applicable only in the case of annual and termination reports.

Page Number	4	Schedule C

Reporting Individual's Name: Helmut A. Merklein

Agency Use Only

Date of Filing (Month, Day, Year): JAN 9 1985

I. Lodging, Transportation, Food and Entertainment—*List each source totaling $250 or more in value*

Sch C	Source (Name and Address)	Brief Description	Value
	Not applicable		

II.—All Other Gifts—*List each source totaling $100 or more in value*

Sch C	Source (Name and Address)	Brief Description	Value
	Not applicable		

III. Reimbursements—*List each source totaling $250 or more in value*

Sch C	Source (Name and Address)	Brief Description	Value
	Not applicable		

Federal Disclosure Report (Rev. 6/81)

This schedule, except as noted for the third section, is applicable in the case of all reporting individuals.

Reporting Individual's Name	Agency Use Only: Date of Filing (Month, Day, Year)	Page Number		Schedule
Helmut A. Merklein	JAN 9 1985	Page	5	D

LIABILITIES

S or DC	Name and Address of Creditor	Type of Liability (e.g., promissory note, mortgage account) Give date, interest rate and, if applicable, term	Amount of Liability
	None		

POSITIONS HELD

Name and Address of Organization	Type of Organization	Position Held	From (Mo., Yr.)	To (Mo., Yr.)
Texas A&M University, College Station, Texas 77483	University	Professor	Sept 1982	Nov 1983
Hoppe AMERICAN OIL & GAS CO. Nieuw Stratenbaan 39 2360 Old Turnhout, Belgium	Oil & Gas Investments	Consultant	March 1982	July 1983

COMPENSATION IN EXCESS OF $5,000 PAID BY ONE SOURCE This section is applicable only in the case of nominees and new entrants.

Source (Name and Address)	Brief Description of Duties
Texas A&M University, College Station, Texas 77483	Professor of petroleum engineering (salary as shown above)

RELATIONS WITH OTHER EMPLOYERS

Description of Terms of Any Agreement or Arrangement	Parties	Date (Mo., Day, Yr.)
None		

Department of Energy
Washington, DC 20585

APR 2 2 1985

The Honorable James A. McClure
Chairman
Committee on Energy and Natural Resources
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

Please be advised that, pursuant to section 201(b) of the Ethics in Government Act of 1978, as amended, I have informed the appropriate ethics officials that the information required by ~~section~~ 202(a)(1)(A) with respect to income and honoraria is current as of APR 22, 1985. This date is within five days prior to the date of the first hearing scheduled to consider my nomination.

Sincerely yours,

Helmut A. Merklein

Helmut A. Merklein

DISTRICT OF COLUMBIA ss

Subscribed and sworn to before me this 22nd day of April, 1985.

Notary Public

cc: The Honorable J. Bennett Johnston

Department of Energy
Washington, D.C. 20585

MAR 27 1985

Memorandum for Helmut A. Merklein, Administrator
Energy Information Administration

Subject: Statement of Agency Ethics Official for Senate Committee

This memorandum is intended to serve as a statement from the designated agency ethics official of this Department, as required by question 5, page 6, of the Statement for Completion by Presidential Nominees that you are submitting to the United States Senate Committee on Energy and Natural Resources in connection with your nomination for the position of Administrator of the Energy Information Administration (for which you now hold a recess appointment). I have reviewed your Standard Form 278 (Financial Disclosure Report) dated December 17, 1984, and have certified that the information contained therein discloses no conflict of interest under applicable laws and regulations. You have advised me, and I have noted on the form, that this report is current through January 9, 1985. 1/

As a supervisory employee of the Department, you are prohibited by section 602(a) of the DOE Organization Act (Pub. L. 95-91) from knowingly receiving compensation from, holding any official relation with, or having any pecuniary interest in any energy concern. The term "energy concern" is defined in section 601(b) of the Act as any entity "significantly engaged in the business" of any of a variety of activities related to energy production, distribution, sale, or research and development, or any entity significantly engaged in such research and development pursuant to a DOE-funded program irrespective of whether it otherwise engages in such business. The term also includes any entity holding an interest in property from which an energy resource is commercially produced or obtained. Your Standard Form 278 does not list any currently held interest in an energy concern.

Section 208, title 18, United States Code, prohibits you from participating personally and substantially, as a Government employee, in any particular matter in which, to your knowledge, you have, or your spouse, minor child, partner, organization in which you are serving as officer, director, trustee, partner, or employee, or any person or organization with whom you are negotiating or have any arrangement concerning prospective

1/ Section 201(b) of the Ethics in Government Act (Pub. L. 95-521) requires the income and honoraria information on your form to be updated within five days before the date of the Committee hearing to consider your nomination.

employment has, a financial interest. Accordingly, you should avoid participation in any particular matter the outcome of which could have a direct and predictable effect on any such financial interests.

Please let me know if I can be of further assistance.

Ralph D. Goldenberg
Assistant General Counsel
for General Law

APPENDIX II

Responses to Additional Committee Questions From the Nominees

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1702 Mason Hill Drive
Alexandria, Virginia 22307
April 29, 1985

Honorable James A. McClure
Chairman, Committee on Energy
and Natural Resources
United States Senate
Washington, D.C. 20510

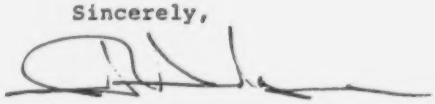
Dear Mr. Chairman:

Following the April 26 hearing before the Committee on Energy and Natural Resources on my nomination to the position of Under Secretary of the Department of Energy, you submitted to me a number of questions to be answered for the record. The answers to those questions are enclosed. I have taken the liberty of forwarding a copy of the responses to the Senators who asked the questions.

I appreciate the many courtesies you, the members of the Committee, and the Committee staff extended to me at the hearing and look forward to working with you and the Committee, should my nomination be confirmed by the Senate.

Please feel free to contact me should you have additional questions.

Sincerely,



Joseph F. Salgado

Enclosure

POST-HEARING QUESTIONS AND ANSWERS

RELATING TO THE

APRIL 26, 1985 CONFIRMATION HEARING

OF

JOSEPH F. SALGADO

NOMINEE FOR UNDER SECRETARY OF ENERGY

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES

UNITED STATES SENATE

QUESTION FROM SENATOR BUMPERS

Question: Where nuclear power plant construction can be deferred through the implementation of energy conservation technologies that are cost effective, what role do you think the DOE should play?

Answer: The Department will continue to emphasize the importance of energy conservation and supports the cost-effective use of conservation wherever possible. However, decisions regarding the construction of nuclear or other power plants should be made by utilities on the basis of their judgments regarding the need for new generating capacity. The Department's role is to provide options to the market through research and development in conservation, nuclear and other energy technologies. The Department does not have a direct role to play in deciding when new power plants should be constructed or deferred. Such decisions are best made by local utilities and state regulatory authorities on the basis of local energy demand estimates and related market conditions.

QUESTION FROM THE MINORITY

Question: Is the Office of Conservation and Renewable Energy currently in compliance with the personnel floors imposed by Congress in Appropriations Acts?

If not, when will the Office come into compliance?

Answer: Those programs in Conservation and Renewable Energy subject to the statutory employment floors of Public Law 97-257 have an onboard count of 325 as of March 31, 1985 against a floor of 352. We have experienced great difficulty in recruiting qualified individuals to fill the engineering and other specialized positions required to administer these programs. This is primarily due to the greater pay and benefits being offered in the private sector. However, the Department has given high priority to filling these positions and anticipates reaching the employment level required by the floors late in Fiscal Year 1985.

QUESTIONS FROM SENATOR EVANS

As Chief Operating Officer, you will be responsible for management decisions regarding the organizational structure of the Department, including the Power Marketing Administrations. The Bonneville Power Administration (BPA) represents approximately 25% of DOE in terms of staffing and budgetary resources. The BPA Administrator currently reports directly to the Office of the Secretary, providing it with direct access to the Secretary for significant decisions. The 1977 DOE Organization Act provides Bonneville with a degree of flexibility necessary to carry out its responsibilities to the federal government, and ratepayer and customer groups in the Northwest.

Secretary Herrington, in answer to a question I asked during his confirmation hearings, indicated that he did not plan any changes in the management structure of the PMA's, although he did say he would be reviewing it.

Question 1: Could you assure me that Bonneville will continue to have its flexibility to manage its affairs without undue interference from other entities within the Department?

Answer: If confirmed as Under Secretary, one of my principal missions will be to assist the Secretary in seeing to it that the Department's many activities are efficiently managed. In my view, such efficient management would necessitate Bonneville, as well as the other Power Administrations, having sufficient flexibility to carry out their functions and avoiding overly complex reporting relations that might result in undue interference with the Power Administrations.

QUESTIONS FROM SENATOR EVANS

Question 2: Do you have any plans to change the reporting hierarchy of Bonneville?

Answer: If confirmed, I would expect to aid the Secretary in his review of the management structure by which the Department carries out its functions. The Department of Energy Organization Act provides that power marketing functions shall be exercised by and through the Administrator of each Power Administration, and also that power marketing functions must be assigned to or among the eight Assistant Secretaries. While I do not now have any particular plans directed to reporting relations of the Power Administrations, any recommendations I would make if confirmed would reflect these statutory requirements as well as the clear need for the PMA's to carry out their significant responsibilities efficiently and with dispatch.

QUESTIONS FROM SENATOR EVANS

Question 3: Would you please inform me of any plans prior to implementation regarding the management structure of BPA within the Department?

Answer: I intend to notify this Committee of any plans for significant alterations in the Department's management structure or reporting relations. If confirmed as Under Secretary, I would be pleased to discuss these matters with you at your convenience, as well as with any other member of the Committee who so wishes.

4919 Palisades Lane, N.W.
Washington, D.C. 20016
April 29, 1985

Honorable James A. McClure
Chairman, Committee on Energy
and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

Following the April 26 hearing before the Committee on Energy and Natural Resources on my nomination to the position of General Counsel of the Department of Energy, you submitted to me a series of questions to be answered for the record. The answers to those questions are enclosed. I have taken the liberty of forwarding a copy of the responses to the requesting Senator.

I appreciate the many courtesies you and the members of the Committee and its staff extended to me at the hearing and look forward to working with you and the Committee, should my nomination be confirmed by the Senate.

Please feel free to contact me should you have additional questions.

Sincerely,

J. Michael Farrell

Enclosure

POST-HEARING QUESTIONS AND ANSWERS

RELATING TO THE

APRIL 26, 1985 CONFIRMATION HEARING

OF

J. MICHAEL FARRELL

NOMINEE FOR GENERAL COUNSEL

DEPARTMENT OF ENERGY

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES

UNITED STATES SENATE

QUESTIONS FROM SENATOR DANIEL J. EVANS

Question: The Northwest Power Act vested in the BPA powers it did not previously have; namely, the authority to acquire major generating resources. That authority, however, was conditioned on the consent of the states of the Pacific Northwest, acting through the Northwest Power Council. Do you agree this condition vests in the Northwest Power Council authority to limit certain actions of the BPA? If so, do you view this arrangement to be constitutional?

Answer: I am advised that the Northwest Power Act (Act) grants various authorities to the Northwest Power Council (Council) to further the purposes and goals of the Act. Among these is the power to develop a regional conservation and electric power plan (Plan), and to make determinations of whether major resource acquisition proposals are consistent or inconsistent with the terms of such Plan.

I am further advised that the manner and degree to which these statutory authorities may serve as limitations upon BPA depends upon the particular facts and circumstances of a given situation. The question of the constitutionality of this arrangement would likewise turn on whether the Council in a particular case would be "exercising

significant authority" pursuant to federal law within the meaning of Buckley v. Valeo, 424 U.S. 1, 126 (1976).

I do understand, however, that in its recent brief in the Seattle Master Builders case the government took the position that the Council's exercise of authority in that case is in fact consistent with the Constitution, and that the court should not reach the constitutional questions raised by other statutory provisions not involved in the particular facts of that case. I believe that this approach was intended to preserve the present Council arrangement, which appears to provide an effective and efficient balancing of legitimate state and federal interests.

QUESTIONS FROM SENATOR EVANS

Question: The Coastal Zone Management Act gives the consent of Congress to the formation of interstate compact agencies for the purpose of developing coastal zone management plans. The Coastal Zone Management Act requires federal activities be consistent with those plans. Likewise, proposed legislation consenting to interstate compacts for the disposal of low-level radioactive waste would consent to the formation of interstate compact agencies and requires federal consistency with their disposal plans. Please compare and contrast these legislative schemes with that set out in the Northwest Power Act.

Answer: My understanding of the Coastal Zone Management Act (CZMA) is that it encourages coastal states to exercise their police powers to regulate land use and certain marine activities in the coastal zone. That statute requires determination whether federal activities in the zone are consistent with such state regulation. Constraints on federal activities would appear to result from the CZMA's waiver of sovereign immunity from state regulation that otherwise would exist under the Supremacy Clause.

I am advised that the pending bills that would consent to interstate compacts for disposal of low-level radioactive waste are directed to authorizing the compacts themselves (which is

required by the Constitution) and the restrictions of regional disposal facilities to waste generated within the region.

The Northwest Power Act does provide the required consent of Congress for establishment of the Northwest Power Council. In contrast to the CZMA, the statutory scheme of the Northwest Power Act appears to have the Council derive all of its authority from the federal statute, rather than from each State's exercise of its police power. If the exclusive source of the Council's authority is federal law, then the question that may occur is whether this authority is the type that may be wielded only by individuals appointed pursuant to the Appointments Clause of the Constitution.

QUESTIONS FROM SENATOR DANIEL J. EVANS

Question: Your predecessor recently stated that Northwest Power Council's model conservation "standards and surcharge recommendations are advisory only." In your view, does the BPA have the authority to impose a conservation surcharge which disregards the surcharge recommendatons of the Northwest Power Council?

Answer: As I understand the Northwest Power Act, section 4(f)(2) provides that the Council is authorized to recommend a surcharge to the Administrator of BPA, which he or she "may thereafter impose." This text suggests that BPA is not required to implement the Council-recommended surcharge.

As to BPA's authority, I am advised that it has broad discretionary ratemaking authority which BPA may use, among other purposes, to encourage the adoption of conservation measures.

QUESTIONS FROM SENATOR DANIEL J. EVANS

Question: Your predecessor as General Counsel appears to have taken the position that the Northwest Power Council may not decline to approve the acquisition of a major generating resource if the BPA declines to adopt the Council's conservation standards and impose the recommended surcharge. Do you agree with his interpretation of the Northwest Power Act?

Answer: It is my understanding that the Act authorizes both BPA and the Council to determine whether any given major resource acquisition proposal is consistent or inconsistent with the Council's Plan.

I am advised that the Act also provides that BPA may not implement any such proposal that is determined by either BPA or the Council to be inconsistent with the Council's Plan unless the Administrator finds that such resource is needed to meet his or her obligations under the Act, and until Congress has specifically appropriated funds for such an acquisition.

I am also advised that, in the Seattle Master Builders case, the Department's General Counsel agreed with the approach adopted by the government in its brief, which suggests that the court

confine its decision to the issues actually presented by the facts of that case. I understand that, to date, the events described in your question have not occurred. From what I understand of the factual and legal issues presented by that case, I have no basis to disagree with the approach the government has taken to them.

Department of Energy
Washington, D.C. 20585

April 29, 1985

Honorable James A. McClure
Chairman, Committee on Energy
and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

Following the April 26 hearing before the Committee on Energy and Natural Resources on my nomination to the position of Administrator, Energy Information Administration of the Department of Energy, you submitted to me a number of questions to be answered for the record. The answers to those questions are enclosed. I have taken the liberty of forwarding a copy of the responses to the Senators who asked the questions.

I appreciate the many courtesies you and the members of the Committee extended to me at the hearing and look forward to working with you and the Committee, should my nomination be confirmed by the Senate.

Please feel free to contact me should you have additional questions.

Sincerely,

H. A. Merklein

Helmut A. Merklein

Enclosures

POST-HEARING QUESTIONS AND ANSWERS

RELATING TO THE

APRIL 26, 1985 CONFIRMATION HEARING

OF

HELMUT A. MERKLEIN

NOMINEE FOR ADMINISTRATOR
OF THE
ENERGY INFORMATION ADMINISTRATION

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES

UNITED STATES SENATE

47-567 O—85——6

QUESTIONS FROM SENATOR BUMPERS

Question 1: How do you intend to coordinate analytical work by EIA with analytical work done by the Department's Office of Policy, Planning and Analysis?

Answer: If confirmed, I intend to maintain the statutory independence of the Energy Information Administration in its analytical and forecasting work. However, before embarking on a given analysis, the Energy Information Administration will continue its practice of seeking input of interested and knowledgeable parties, including other Department of Energy offices, Congressional staff, other agencies, and outside groups. During the preparation of Energy Information Administration analyses, technical comment is welcomed from those sources that have a special interest or expertise in the subject.

QUESTIONS FROM SENATOR BUMPERS

Question 2: You have served as an Assistant Secretary in the Department with responsibilities for international affairs, and in that context, participated in policy formulation for energy emergency preparedness. What kinds of capability for data collection and information analysis is needed to address energy emergencies? Please describe the standby capabilities of this sort that you would like to have in existence at EIA.

Answer: The Energy Information Administration has an integrated and coordinated program for the collection of information for use in day-to-day decisionmaking processes. A sizeable portion of this program is specifically designed to understand and to respond to energy emergencies. The Energy Information Administration collects and publishes information on domestic crude oil production, refinery operations, product movements by pipeline or water, petroleum stocks and imports. These data are recognized as the authoritative data for all of these categories.

As part of its ongoing program, the Energy Information Administration collects and publishes statistical information on all of the mentioned categories each week. This program provides current information on the condition of the domestic market which the Energy Information Administration could quickly build upon in response to a developing emergency. In addition, the Energy Information Administration and the U.S. Customs Service have a cooperative program supporting the Petroleum Imports Licensing and Accounting System which

provides direct access to information on imports of petroleum products--usually within twenty-four hours of importation.

The Energy Information Administration has also worked closely with industry associations and representatives of State governments and developed a program of data sharing and exchange. These efforts have, in the past, related specifically to heating oil and motor fuel stocks and prices. The programs in place cannot, of course, address every possible emergency situation that could occur. They can, and do, however, provide the mechanism for rapidly obtaining additional data needed in a specific emergency situation. The true value of all of the current data efforts lies, really, in the contacts and lines of communication that are established and kept open to deal with developing energy emergencies.

The Energy Information Administration has an ongoing program to maintain the capability to quickly assess the situation in the world oil market and the potential effects on the United States. Reasonably reliable assessments of the price and economic impacts of supply disruptions are crucial to the many policy discussions and industry decisions that would need to be made. The Energy Information Administration maintains a ready capability in this area and chairs the interagency Data Base and Projections Group which routinely assesses the vulnerability of the United States to a supply disruption.

Extensive data on the international oil market are updated monthly in the International Petroleum Statistics Report and made available via computer to energy emergency planners. Oil prices are monitored daily and published weekly in the Weekly Petroleum Status Report. Other aspects of oil market activity are also monitored daily and summarized biweekly for the Department of Energy management in the International Petroleum Market Scan.

Computer models of international oil supply, demand, trade, and refining are updated quarterly and maintained in a constant state of readiness. The Disruption Impact Simulator is a computerized model of the current world oil market that is updated quarterly. It can be used to assess price and economic impacts and the effects of the International Energy Agency's International Energy Program. Its data and parameters receive interagency approval by the Data Base and Projections Group and, thus, it is designed for use in the interagency policy discussions in the early days of a supply disruption. The Energy Information Administration also maintains the detailed Oil Market Simulation model of the world oil market and the Petroleum Allocation model of world refineries and trade in both crude oil and refined petroleum products. All these analysis capabilities are ready for use in the event of an energy emergency.

The Energy Information Administration does not believe any additional standby capabilities are needed to address future energy emergencies. We have the authority to collect and analyze information necessary to the understanding of these problems and will do so when necessary.

QUESTIONS FROM SENATOR BUMPERS

Question 3: On April 2, 1981, you testified before the House Subcommittee on Fossil and Synthetic Fuels on the subject of oil emergency preparedness. In that hearing you stated, "The full text of my prepared statement shows that an unrestricted supply response to free prices in oil and gas is capable of achieving complete U.S. energy independence by 1990. This assumes the elimination of the windfall profits tax, which, however, would cost the U.S. Government very little, since a concurrent increase in corporate income tax receipts would make up for most of the windfall profits tax loss."

Do you still stand by that statement? Do you believe that all that stands between our country and energy independence is repeal of the windfall profits tax?

Answer: That is not my belief. The quoted passage deals essentially with prices, rather than taxes. The paragraph preceding the cited text deals with "the effectiveness of the price mechanism with respect to demand." The next paragraph starts with the statement that "the effectiveness of the price mechanism with respect to supply is not yet fully understood, or perhaps not yet fully believed." Then, and only then, follows the quoted passage, referring to the elimination of the windfalls profits tax as an underlying assumption in the prepared statement.

You also stated in that hearing that the IEA oil sharing plan should be scrapped. Do you still agree with that?

Answer: The full quote related to the question is as follows: "The fundamental problem with the entire IEA oil sharing plan, as far as I can see it, is that it totally ignores pricing. For that reason, it will run counter to the market. It cannot succeed in its present form, no matter how sophisticated it is. In my view, the plan should be scrapped."

Subsequent events have supported my view. In December of 1983, the International Energy Agency changed its operating procedures by eliminating its existing international price guidance for an energy crisis and by permitting the use of more flexible pricing principles instead. This is an example of the way the U.S. Government continues to work with the International Energy Agency to improve the system and to make it more closely attuned to the market.

QUESTIONS FROM SENATOR BINGAMAN

Uranium

The Energy Information Administration is responsible for implementing the information collection and data analysis requirements associated with Section 23 of Public Law No. 97-415. From the information collected, the Secretary makes a determination each year on the viability of the domestic uranium industry.

Question 1: When will the next viability determination be made?

Answer: It is my understanding that Secretary Herrington plans to make the determination for calendar year 1984 this summer. The Energy Information Administration is committed to providing the information and analysis to meet this schedule.

QUESTIONS FROM SENATOR BINGAMAN

Uranium

Question 2: Are you reconsidering the current definition of viability or the criteria on which that definition is based?

Answer: The viability criteria were established pursuant to Section 170B of the Atomic Energy Act as amended, 42 U.S.C. 2210b, wherein Congress required the Department of Energy to issue, by rule, criteria to assess the viability of the U.S. uranium mining and milling industry, and specified eight minimal criteria the Secretary must weigh and consider in reaching his conclusion.

The final criteria, published on October 6, 1983, were established consistent with the Act's eight specified criteria and after considering input at three public hearings and a 30-day written comment period. I understand that the Department of Energy may re-evaluate the existing criteria.

QUESTIONS FROM SENATOR BINGAMAN

Uranium

Question 3: Do you feel it is the responsibility of the Energy Information Administration to investigate and become knowledgeable with the policies of our trading partners with respect to the pricing of their domestic uranium?

Answer: I believe the Energy Information Administration is responsible and credible in examining and maintaining an awareness of the pricing policies followed by foreign suppliers and their governments. The Energy Information Administration takes into account, in its models and analyses, the effect of these policies on the international uranium market. For example, the Australian government administers a mandatory floor price for its domestically produced uranium. Canada requires in its export contracts that the price be the maximum of a floor price or a negotiated price reflecting the prevailing market price at the time of delivery. Canada's stated objective is to assure that its domestically-produced uranium not be exported for better terms than its domestic purchasers receive. South Africa follows a practice of not selling into the spot market at lower prices than the prices committed in its long-term contracts.

QUESTIONS FROM SENATOR BINGAMAN

Uranium

Question 4: Does the Energy Information Administration currently look into foreign subsidization of uranium being imported into this country?

Answer: As part of our core program involving the estimation of foreign uranium production costs, we maintain publicly available documents (such as foreign uranium company annual financial reports and mining publication articles) which do provide some information concerning certain foreign government support programs.

QUESTIONS FROM SENATOR BINGAMAN

Uranium

Question 5: Please provide me any information you have relating to the prices paid by Canadian utilities for Canadian produced uranium? How does this price differ from the Canadian uranium purchased by U.S. utilities?

Answer: The Energy Information Administration has some information on the prices paid by Ontario Hydro for its uranium purchases, primarily from Ontario Hydro's annual reports of their Fuels Division and Ontario Hydro's rate submissions before the Ontario Energy Board. During 1983, Ontario Hydro paid an average of about U.S. $37 per pound for its U_3O_8 deliveries from Canadian producers (assuming an exchange rate of 1.25 Canadian dollars to one U.S. dollar). This price is about equal to the average price of $38 per pound paid by U.S. utilities for U.S. origin uranium, but higher than the $26 per pound price paid by U.S. buyers for imports (two-thirds of which were from Canada).

As a caveat, it is important to keep in mind that uranium is sold mostly under long-term contracts. About 80 percent of Ontario Hydro's 1983 uranium deliveries were covered by long-term contracts signed in 1978. The average uranium contract signed in 1978 with a U.S. producer specifies a price of about $46 per pound (for delivery in 1983 and beyond). Most of the uranium imported from Canada in 1983 was covered by contracts signed since 1980, and thus reflects the lower prevailing market prices of the 1980's. Therefore, the fact that prices of

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Canadian imports are lower than prices paid by Ontario Hydro is not necessarily inconsistent with prevailing uranium market conditions at the time of signing of these long-term contracts.

QUESTIONS FROM SENATOR BINGAMAN

Uranium

Question 6: Has the Energy Information Administration or any other agency at the Department of Energy made an effort to obtain any information on possible subsidies paid by the Canadian government to Canadian utilities or producers?

Answer: The Energy Information Administration does have information about Canadian Government support or regulation of their uranium industry, as stated in the answer to question 3 above. All of this information is from publicly available sources and includes such topics as the transfer of the Canadian Government uranium stockpile to Eldorado Limited, the approval of uranium export terms and conditions, Canadian government equity participation in uranium companies, and Canadian policies to encourage the long-term commitment of their uranium needs to Canadian producers.

QUESTIONS FROM SENATOR BINGAMAN

Annual Energy Outlook

Question 1: The Energy Information Administration publishes an Annual Energy Outlook. This publication makes projections related to our future energy needs. EIA bases these projections on a variety of price assumptions and economic scenarios. What are your sources for current information and what models do you use to base your assumptions?

Answer: The Annual Energy Outlook is based on published Energy Information Administration data and represents an integration of the relevant forecasting efforts of all Energy Information Administration offices. The primary sources of information for this report are the most recent Energy Information Administration data reports, including the Annual Energy Review, the Petroleum Supply Annual, the Natural Gas Annual, and other fuel-specific annual reports. The Annual Energy Outlook projections are presented in the same format as the data tables of the Annual Energy Review.

Other Energy Information Administration data systems are used in the development of particular models. These include the Generating Units Reference File, which provides detailed information on electric power plants, and the Residential Energy Consumption Survey and Nonresidential Buildings Energy Consumption Survey, on which the sectoral demand models are based. The most recent available information is incorporated in the projections by calibrating, just prior to publication, to the most recent Short-Term Energy Outlook published by the Energy Information Administration.

A number of models are used to develop the projections contained in the Annual Energy Outlook. The Intermediate Future Forecasting System forms the integrating framework, linking together the following individual modules:

- Electric Utilities Module;
- Gas Analysis Modeling System including a model called Production of Lower-48 Oil and Gas which provides the lower-48-States oil and gas production estimates;
- Refinery Oil Market Module
- Coal Module (The Coal Supply and Transportation Model);
- Sectoral Demand Modules (Household Model of Energy, Purchased Heat and Power System, Commercial Sector Energy Model, and Transportation Sector Energy Model).

Additional significant support is provided by:

- Short-Term Integrated Forecasting System which provides 1985 and 1986 forecasts.
- National Utility Financial Statement Model which is

the basis for the utility financial accounting system in the Intermediate Future Forecasting System.

- Resource Allocation and Mine Costing Model which provides coal supply and price projections.

- The Refinery Evaluation Modeling System which provides the price calibration for petroleum products.

A major external input to the Intermediate Future Forecasting System analyses of energy is the projected world price of crude oil. Future crude oil prices are estimated using the Oil Market Simulation Model to account for production capacity, economic growth, and demand in the market economies. The baseline assumptions about the behavior of the domestic economy are based on values for gross national product and other macroeconomic variables forecast by Data Resources, Inc.

A more complete explanation of data sources and models used is published in Appendix F of the Annual Energy Outlook. A copy of Appendix F is attached.

APPENDIX F
Forecasting Methodology and Assumptions

The Basic Models

The forecasts presented in this Annual Energy Outlook result from the interaction among model representations of the key energy supply, conversion, and consuming sectors. The forecasts represent solutions to the integrating framework of the Intermediate Future Forecasting System (IFFS),[1] which provides an internally consistent set of prices and quantities for which energy supplies equal consumption on an annual basis. The assumptions underlying the representations reflect recently published values for historical data, empirically estimated relationships observed over recent history, and plausible paths for future behavior.

Natural gas supply in the IFFS is represented by the Gas Analysis Modeling System (GAMS).[2] Although the GAMS itself is an independent representation of the gas markets, it is used as the IFFS natural gas supply module in the context of the linked IFFS/GAMS.[3]

The IFFS accommodates for the major economic factors affecting energy supply and demand, including interfuel competition and Government policies and regulations. Although the IFFS includes some representation of new technologies, it emphasizes the major fuels. The IFFS consists of a central integrating procedure, together with individual modules for electric utilities, oil refining, natural gas supply, coal supply, and energy demand by end-use sector. Interactions between the energy sector and the overall economy are represented in the end-use demands sector.[4] The current operation of the model is depicted in Figure F1.

A major external input to the IFFS analyses of energy is the projected world price of crude oil. Future crude oil prices are estimated using the Oil Market Simulation (OMS) Model[5] to account for production capacity, economic growth, and demand in the market economies. The baseline assumptions about the behavior of the domestic economy are based on values for gross national product and other macroeconomic variables forecast by Data Resources, Inc.[6]

Individual Modules

Each module simulates either the consumption activities of end-users or the operating and investment activities of firms supplying major energy forms. On the

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[1] Energy Information Administration, Intermediate Future Forecasting System: Executive Summary, DOE/EIA-0430 (Washington, DC, 1983).

[2] Energy Information Administration, Model Documentation of the Gas Analysis Modeling System, DOE/EIA-0450, Volumes 1-3 (Washington, DC, 1984).

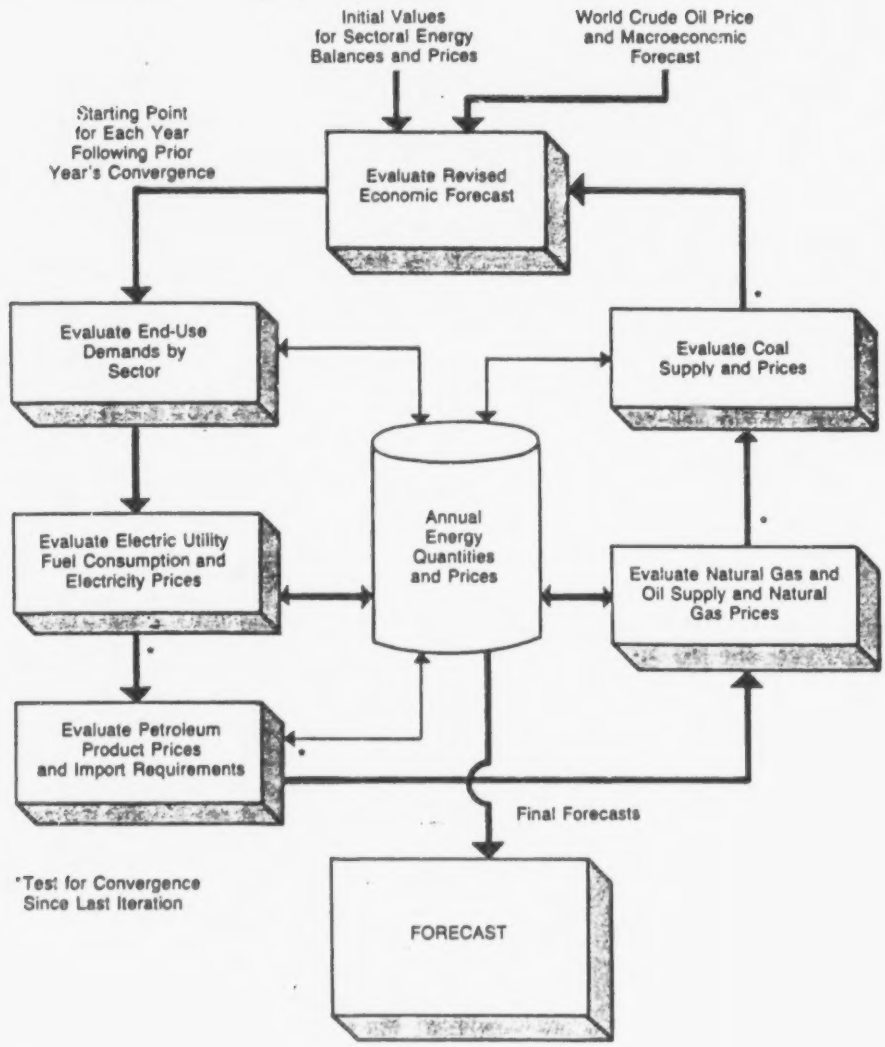
[3] Energy Information Administration, Linkage Methodology of the Intermediate Future Forecasting System/Gas Analysis Modeling System Interface for the Annual Energy Outlook, 1983, DOE/EIA-0456 (Washington, DC, 1984).

[4] Energy Information Administration, Office of Energy Markets and End Use, Model Documentation of the Mini-Macroeconomic Model: MINMAC, in clearance as of December 1984 (Washington, DC).

[5] Energy Information Administration, Oil Market Simulation Model Documentation Report, DOE/EIA-0412(83/06) (Washington, DC, 1983).

[6] Data Resources, Inc., U.S. Long-Term Review, Fall and Summer 1984 issues (Lexington, MA).

Figure F1. IFFS/GAMS Calculation Flow


Initial Values for Sectoral Energy Balances and Prices
World Crude Oil Price and Macroeconomic Forecast
Starting Point for Each Year Following Prior Year's Convergence
Evaluate Revised Economic Forecast
Evaluate End-Use Demands by Sector
Evaluate Coal Supply and Prices
Annual Energy Quantities and Prices
Evaluate Electric Utility Fuel Consumption and Electricity Prices
Evaluate Natural Gas and Oil Supply and Natural Gas Prices
Evaluate Petroleum Product Prices and Import Requirements
Final Forecasts
*Test for Convergence Since Last Iteration
FORECAST

demand side, separate modules are used to represent the residential, commercial, industrial, and transportation sectors. The supply modules include electric utilities, oil refining, natural gas, and coal. Although the results presented in the Annual Energy Outlook are for the United States as a whole, the IFFS contains regional disaggregation that varies by module as necessary to adequately represent regional diversification. Regionalized activities are integrated through a transportation network where appropriate, primarily in the coal and natural gas supply module.

The individual supply modules have essentially the same basic structure for representing operating and investment decisions. Operating decisions use only current period prices. Investment projections are made based on past and projected future prices. The calculations are made under the assumption that energy producers are cost-minimizers. This is consistent with market conditions in which no single coal, oil, or natural gas firm represents a market force that is significant enough to affect prices measurably. Electric utilities are treated as regulated regional monopolies that attempt to minimize cost.

Consuming Sectors

The residential and commercial modules compute consumption of major energy forms taking account of the stock of structures, available fuel choices, and energy utilization by end use.[7] The modules are disaggregated by end uses (including space heating, water heating, and air conditioning) and several fuel/technology types. Structures are analyzed on the basis of groupings by major regions and year of construction.

Industrial demands for direct heat, process steam from boilers, and power, including machine drive, are forecast for each of 17 categories of manufacturing activity. These demands are sensitive to manufacturing output, capital availability, and labor, material, and energy prices.[8] Heat and power consumption outside of manufacturing and petroleum feedstocks use at the national level are projected by econometric equations that differ from sector to sector. In most cases, the projection is dominated by historical trends in the ratio of fuel use to economic activity.

The demand for transportation sector services is disaggregated into the following categories: passenger cars, single-unit and combination trucks, piston aircraft, commercial jets, marine bunker fuel use, jet fuel use, and liquefied petroleum gas use.[9] Highway motor gasoline and distillate fuel use are calculated as the

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[7]Energy Information Administration, Model Documentation: The Household Model of Energy, DOE/EIA-0409 and Model Documentation: The Commercial Sector Energy Model, DOE/EIA-0453 (Washington, DC, 1984).

[8]Energy Information Administration, Documentation of the PURHAPS Industrial Demand Model, Volume I: Model Description, Overview, and Assumptions for the 1983 Annual Energy Outlook, DOE/EIA-0420/1 (Washington, DC, 1984).

[9]Energy Information Administration, Model Documentation: The Transportation Sector Energy Model, DOE/EIA-0454 (Washington, DC, 1984).

product of estimated average fleet efficiency in gallons per mile and vehicle-miles traveled, both of which are responsive to projected prices and economic activity. Estimates of fuel use in the remaining transportation subsectors (rail, marine, LPG, and off-highway diesel use) are based on historical trends, economic activity, and fuel prices.

Energy Conversion Sectors

The Electric Market Module[10] estimates capacity expansion and simulates regulatory behavior in pricing electricity as a function of operating and capital costs. The electric utility industry uses a variety of plant types and fuel inputs: coal-, gas-, or oil-fired steam; gas or oil combined cycle; gas or oil turbines; and nuclear and hydroelectric energy. The utilization of generating capacity is forecast to depend on relative generation costs, reliability, and demand; while capacity expansion is a function of total annualized system cost. Under the current regulatory structure, the supply price is based on the average cost of generation, composed of fuel and operation and maintenance costs. Capital cost includes a capital charge on the undepreciated portion of existing plants and a capital charge for construction work in progress, where allowed.

The petroleum sector contains a representation of refineries and refined product demand.[11] The costs of refined products depend on the world price of oil, the costs of refining the product mix, and transportation and distribution costs. The quantity of imported crude oil is calculated as the difference between the total crude oil input to refineries (determined by the refinery module) and domestic crude production.

Oil, Natural Gas, and Coal Production

The domestic oil and gas supply projections are based on estimates of certain categories of production and EIA analysis systems external to IFFS: the Outer Continental Shelf Oil and Gas Supply Model (OCSM)[12] and the Production of Lower-48 Oil and Gas (PROLOG) Model.[13] These models produce estimates of reserve additions of oil and gas and of the production of oil from both existing and new reserves.

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[10] Energy Information Administration, Model Documentation: Electricity Market Module, DOE/EIA-M001 (Washington, DC, 1984).

[11] A documentation report is in preparation. Discussion of the refining sector of IFFS is found in John Conti, "Introduction to the Oil Subsystem" and Neil J. Cleary, "Refinery Subsystem: A Critique," in Saul I. Gass, Frederic H. Murphy, and Susan H. Shaw, Editors, Intermediate Futures Forecasting System, U.S. Department of Commerce, National Bureau of Standards, NBS SP 670 (Washington, DC, December 1983).

[12] Energy Information Administration, Outer Continental Shelf (OCS) Oil and Gas Supply Model, Volume 1: Model Summary and Methodology Description, DOE/EIA-0372 (Washington, DC, 1982).

[13] Energy Information Administration, Production of Onshore Lower-48 Oil and Gas--Model Methodology and Data Description, DOE/EIA-0345 (Washington, DC, 1982).

Natural gas liquids production is computed as a function of marketed natural gas production.

The gas supply representation, the GAMS, takes into account the major factors that influence the natural gas market including the Natural Gas Policy Act of 1978, current contract provisions, and the possibility of fuel switching. The GAMS contains detailed representations of four groups that interact in the natural gas market: producers, pipeline companies, distributors, and consumers. The GAMS recognizes separate long-term and short-term markets for natural gas.

The coal module is derived from the Coal Supply and Transportation Model (CSTM).[14] The supply component is derived from the Resource Allocation and Mine Costing (RAMC) Model,[15] which uses the quantity of available reserves and the cost of mining (through the use of nine representative mine models) to calculate the amount of coal available at a given price for both underground- and surface-mined coal. The CSTM uses this information to specify the potential levels of coal produced in each region over a range of price levels. To meet each end-use demand, the CSTM determines the least-cost combination of coal supply source and transportation route, taking into account the heat content for different types of coal and emissions control requirements.

Consistency of Data with Other EIA Publications

The consumption levels for the years 1980 through 1985 in this report have been calibrated to be consistent with the most recent information available in other EIA publications. The demand models are calibrated to actual "State Energy Data System" (SEDS) consumption data for 1980, 1981, and 1982, available by fuel, sector, and region, reported in the EIA State Energy Data Report, 1960-1982. The models are also calibrated to the annual data published in the EIA Annual Energy Review, 1983 and to the projections published in the EIA October 1984 Short-Term Energy Outlook (STEO) for 1984 and 1985. Additional fuel detail supporting the aggregate numbers published in the STEO is used in the IFFS/STEO calibration procedure. Full sectoral and regional detail are not available from the STEO publication or supporting analyses; therefore, the IFFS projections of consumption by sectors and regions for 1984 and 1985 are used to share out the totals provided by the STEO.

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[14] Energy Information Administration, Coal Supply and Transportation Model: Model Description and Data Documentation, DOE/EIA-0401 and Coal Supply and Transportation Model: Executive Summary, DOE/EIA-1401 (Washington, DC, 1983).

[15] Energy Information Administration, Documentation of the Resource Allocation and Mine Costing (RAMC) Model, DOE/NBB-0020 (Washington, DC, 1982).

Detailed Assumptions

Macroeconomic Assumptions

The original base case and the high and low economic growth forecasts were based upon modifications of forecasts of Data Resources, Inc., generated in June 1984, called TRENDLONGO684 (for the base case), OPTIM25YRO684 (for the high growth case), and PESSIM25YRO684 (for the low growth case). EIA modifications controlled real world oil prices to follow the path of TRENDLONGO684 in the modified high and low growth forecasts. (TRENDLONGO684 was not modified when used to generate the base case forecasts in EIA's modeling system.)

These original forecasts were subsequently updated in September 1984 by EIA, by adopting DRI's TRENDLONGO984 forecast of September 1984 as the new base case source forecast, and modifying EIA model inputs for the high and low growth cases to reflect this update. The percentage changes in DRI's TRENDLONGO984 forecast, for each variable needed, from the June to September forecasts, were also imposed on the high and low growth cases of June in this update.

As a result of this updating procedure, no actual DRI forecasts can be cited as sources for high and low growth case inputs. This procedure did, however, have the virtue of giving a wider spread than adopting DRI's full set of alternative long-term forecasts for September as inputs. For further details, see the Memorandum to the Record, EIA, Office of Energy Markets and End Use, "Macroeconomic Forecasts for AEO84," December 7, 1984.

Residential and Commercial Sector Assumptions

Residential electricity, natural gas, fuel oil (distillate and kerosene), and liquefied petroleum gas (LPG) consumption are calculated using a structural equation system. This system consist of sets of equations to forecast housing stocks, fuel shares, and average utilization. New housing is assumed to be allocated to Census Regions and housing types according to the average ratios in the "Annual Housing Survey" (AHS). Retirement rates for the housing stock are derived from "Energy Capital in the U.S. Economy."

The elasticities of fuel shares with respect to fuel costs for space heating in new structures are assumed to equal one. This provides a one-to-one response between the changes in the relative costs of fuels and the changes in the logit form for fuel shares. Air conditioning fuel shares in new structures are based on trends in the late 1970's. Forecast fuel shares in new structures for water heating and other uses are assumed to equal forecast fuel shares in the previous year. For existing structures, fuel shares for space heating are forecast to change based on relative prices, investment costs, and other factors which would affect the decision to convert from fuel oil to natural gas. Initial data for new fuel shares are from "Characteristics of New Housing" (CNH), and initial data for

existing fuel shares are based on a combination of the "Residential Energy Consumption Survey (1981)" (RECS)[16] and the 1981 AHS.

Long-term utilization (energy use per household) for each of the major fuels is estimated from RECS data. The short-term (one year) utilization elasticity is assumed to be 20 percent of the estimated long-term elasticity for each of the end uses. The elasticities for fuel oil utilization and natural gas utilization are assumed to be the same. The electric heat pump use portion of total electric space heat is assumed to equal that which is reported in the 1982 CNH. The coefficient of performance (ratio of energy delivered to electric energy used) for heat pumps is assumed to be 1.4 in the base year. Residential wood consumption forecasts are based on a logit equation with an upper limit on use assumed to be no more than 50 percent above the highest wood use in the last 10 years as detailed in EIA's "Estimates of U.S. Wood Energy Consumption from 1949 to 1971."

Commercial electricity, natural gas, and fuel oil use are projected using a structural system which forecasts commercial floorspace, fuel shares, and average utilization. The commercial floorspace stock is based on data from the "Nonresidential Buildings Energy Consumption Survey" (NBECS) for 1979. The retirement rate for existing floorspace is assumed to be 0.6 percent annually. Fuel choices in newly constructed floorspace are assumed to equal an average of those in the 1974 through 1980 vintage structures and those in vintages before 1974 from the NBECS. Fuel choices in existing floorspace are assumed not to change during the forecast period. Long-term utilization for each of the major fuels is estimated from NBECS data. The short-term utilization elasticity is assumed to be about 3.5 percent of the estimated long-term elasticity for electricity and natural gas, and about 8 percent of that for fuel oil. Coal, LPG's, and motor gasoline consumption estimates are based on growth rates from recent SEDS data.

Industrial Sector Assumptions[17]

Industrial sector energy use is projected by three components of IFFS corresponding to the three groupings in Table A8: heat and power, oil refineries, and raw materials plus minor fuels (except gasoline). (Oil refineries are discussed elsewhere in this appendix.) Natural gas lease and plant fuel, projected in the gas sector, are also included with heat and power in Appendix Table A8.

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[16] Energy Information Administration, Technical Documentation, Residential Energy Consumption Survey: Housing Characteristics, 1980, and Consumption and Expenditures April 1980 through March 1981--Public Use Tape (Washington, DC, 1983).

[17] Energy Information Administration, A Statistical Analysis of What Drives Industrial Demand: Volume III of the PURHAPS Model Documentation, DOE/EIA-0420/3 (Washington, DC, December 1983), Documentation of the PURHAPS Industrial Demand Model, Volume I: Model Description, Overview, and Assumptions for the 1983 Annual Energy Outlook, DOE/EIA-0420/1 (Washington, DC, 1984), and Documentation of the Industrial Minor Fuels and Raw Materials Model (MFUEL), DOE/EIA-0490 (Washington, DC).

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Heat and Power. Heat and power consumed in manufacturing is based on the same 17-sector, State-level model used and documented in the 1983 Annual Energy Outlook. However, two changes have been made: The equations to predict total U.S. energy use by industry were fitted to the revised production data from the Bureau of Labor Statistics (for 1958 through 1981), which show less production growth and slightly less conservation than did the preliminary data. The trend towards less energy intensity in the chemical industry is assumed to be 2 percent per year (in addition to the effects of prices), rather than 4 percent in order to reflect recent data suggesting maturation of the industry and to counterbalance an assumption about feedstocks.

Projections of heat and power in agriculture and mining are now based on time-series data. Distillate oil and gasoline used on farms compete on the basis of price; total demand for these fuels has a price elasticity of 0.37. Demand for all fuels reflects trends in the ratio of fuel use to production. In the five mining sectors, preliminary data from the 1982 Census of Mineral Industries are compared with 1972 Census data and a variety of current production measures to estimate these trends. Energy use per unit of output has exhibited an upward trend throughout mining and agriculture from 1972 to 1982 due, in part, to mineral depletion; however, it has remained constant for stone, gravel, and sand extraction and for LPG use on farms. Fuel shares are projected for each of the different sectors based on historical experience.

Raw Materials. The Industrial Minor Fuels (MFUEL) and Raw Materials Model[18] has been updated to reflect complete 1982 data. LPG feedstocks now compete with other petroleum feedstocks on the basis of price. When the price of LPG is 1 percent below the parity price, the ratio of LPG to other feedstocks use rises by 0.38 percent, even when LPG was cheaper in the previous year.

Total feedstocks demand depends on the production of the plastic materials and synthetic fibers industry (SIC 282). From 1963 to 1982, feedstocks use grew faster than SIC 282 output. In the projections, a decline in feedstock use per unit of output of 0.7 percent per year is assumed in order to reflect new developments in plastics. Previously, low-cost bulk plastics production grew rapidly, resulting in high feedstock use per unit of value. In the future, Data Resources, Inc., projects a rapid growth in SIC 282 based on higher value, higher quality specialty products that require more processing. This is expected to reduce oil use by about 1 quadrillion Btu by 1995, relative to that which would be projected based solely on historical trends in the feedstock input to output ratio.

Metallurgical coal use is projected on the basis of an independent analysis by EIA's Office of Coal, Nuclear, Electric, and Alternative Fuels. This projection calls for the ratio of metallurgical coal use to total iron and steel production (SIC 331) to decline at half the rate observed in recent years.

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[18]Energy Information Administration, Documentation of the Industrial Minor Fuels and Raw Materials Model, DOE/EIA-0490 (Washington, DC, 1984).

Transportation Sector Assumptions[19]

Highway fuel consumption calculations are based on analyses of Federal Highway Administration data on vehicle-miles traveled and average fleet efficiency. For passenger cars, single-unit trucks, and combination trucks, total vehicle-miles traveled for both gasoline- and diesel-powered vehicles are forecast on the basis of economic growth as well as the cost per mile of travel and past trends. Fuel efficiency estimates for each vehicle type are based on forecasts of fuel prices as well as past trends in efficiency.

Total jet fuel consumption is the sum of commercial, general aviation, and military jet fuel consumption. These figures are based on Federal Aviation Administration and EIA forecasts. In estimating commercial jet fuel use, it is assumed that airline activity is represented by revenue passenger-miles for all domestic flights plus one-half of revenue passenger-miles for international flights. It is assumed that commercial cargo jet fuel use is 3.2 percent of commercial passenger jet fuel use. The load factor of 63 percent for commercial jets is assumed to be constant over the projection period.

Transportation electricity consumption is held fixed during the forecast period at its 1981 level of 11 trillion Btu.

Electric Utility Assumptions

Capacity Factors. The utilization rates for existing nuclear and fossil-fired steam plants are based on actual data through 1982. In the projection period, plants experiencing historical utilization rates above 65 percent are assumed to maintain current rates as maximum potential. The potential utilization rates for all other existing coal-fired plants are assumed to grow to 65 percent in 1986 and to remain constant. Table F1 provides the equilibrium cycle capacity factors for nuclear plants. New nuclear plants are assumed to operate at a 44-percent capacity factor during the first fuel cycle (typically the first 2 years of operation) and at the equilibrium cycle capacity factor, thereafter.

Nuclear Fuel. It is assumed that adequate supplies of uranium will exist throughout the forecast period and that the cost in constant dollars will remain unchanged.

Plant Efficiencies. In each forecast year, the plant efficiencies for existing plants are assumed to be the average of the actual 1980 through 1982 figures. The efficiencies for new plants are given in Table F2. Estimates for coal-fired plants were derived from EIA's "Regionalized Capital and Operation and Maintenance Cost Estimates for Emission Control Equipment for New Coal-Fired Power Plants," May 1982. Note that environmental regulations require that any new coal plant that does not have a flue gas desulfurization (FGD) system must use low-sulfur coal. Nuclear and hydroelectric efficiencies are obtained from EIA's December

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[19] Energy Information Administration, Model Documentation: Transportation Sector Energy Demand Model, DOE/EIA-0454 (Washington, DC, 1984).

1983 Monthly Energy Review. All other efficiencies were taken from DOE's Data Notebook Generating Technology Assessment, R-035-DOE-80, January 1980.

Table F1. Equilibrium Cycle Capacity Factors for Nuclear Plants (Percent)

DOE Region	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
1-7, 9	59	60	60	61	61	61	62	62	62	63	63	63	63
8	25	27	29	31	33	34	36	38	40	42	44	46	48
10	45	46	47	48	49	50	51	52	53	54	55	56	57

Environmental Standards. Existing coal-fired plants are assumed to burn the same coal types as they did in 1982, which implies that the plants will meet or exceed the State Implementation Plan (SIP) standards. Coal-fired plants currently under construction which were licensed before September 1978 must satisfy the New Source Performance Standards (NSPS). If the license for a new coal-fired plant was obtained after September 1978, the plant must satisfy the Revised New Source Performance Standards (RNSPS).

Table F2. Efficiencies for New Electric Power Plants (Percent)

Plant Type	Efficiency Rate
Koncoal Fossil-Fired Steam	35
Coal-Fired without FGD	
Bituminous--Low Sulfur	37
Subbituminous--Low Sulfur	36
Lignite--Low Sulfur	35
Coal-Fired with FGD	
Bituminous--All Fuel Levels	35
Subbituminous--Low Sulfur	34
Subbituminous--Medium Sulfur	33
Lignite--Low Sulfur	33
Lignite--Medium Sulfur	34
Combined Cycle	36
Turbines	24
Nuclear Power	31
Hydroelectric Power	33

Plant Capacities. The levels of existing capacity and capacity currently under construction are obtained from EIA's Generating Unit Reference File (GURF)[20] except for nuclear and existing hydroelectric plants. Hydroelectric plants are from the Federal Energy Regulatory Commission (FERC), Hydroelectric Power Resources of the United States--Developed and Undeveloped, FERC-0070, January 1, 1980. Existing nuclear capacities are obtained from the Nuclear Regulatory Commission (NRC), Licensed Operating Reactors, Vol. 8, No. 6, NUREG-0020, June 1984. Projected nuclear capacity additions are from the NRC's Regulatory Licensing, Vol. 12, No. 12, NUREG-0580, January 1984, and modified by a reactor-by-reactor analysis of commercial operation dates.

New Plant Construction. It is assumed that construction and licensing, which is specified on a plant-by-plant basis, typically take 10 or 15 years for nuclear plants, 8 years for fossil-fired steam plants, 4 years for combined-cycle plants, 2 years for turbines, and 5 years for hydroelectric plants. No new construction, except for plants currently planned or under construction, is assumed for gas-fired steam plants and turbines or for nuclear and hydroelectric capacity.

Capital Costs. Capital costs vary significantly according to the location of the new plant. Table F3 contains the capital costs of new plants built in Federal Region 5, which is considered representative of the national average. The estimates for capital costs for new plants in 1983 dollars per kilowatt are based on plants constructed "overnight" and do not include any allowance for funds used during construction (AFUDC). Estimates for coal-fired steam plants were taken from Oak Ridge National Laboratory's Conceptual Capital Cost Model (CONCEP).[21] Nuclear capital costs were obtained from EIA's Quarterly Progress Report on the Status of Reactor Construction. The nuclear cost is the capacity-weighted average of all units currently under construction in Federal Region 5. All other figures were based on data taken from DOE's Data Notebook Generating Technology Assessment, R-035-DOE-80, January 1980. Note that the costs for low- and medium-sulfur lignite-fired plants are from Federal Regions 8 and 6, respectively, since Region 5 does not use lignite.

Construction Profiles. The annual expenditures (as a percentage of the total construction costs) for new nuclear and coal plants, which account for almost all of the capacity additions during the forecast period, are shown in Table F4. The capital expenditure profiles are extracted from the CONCEP Model. The nuclear profiles vary by unit based on differences in lead times for construction.

Cost of Finance. The assumed nominal costs of finance for debt, preferred equity, and common equity range from 12.3, 12.3, and 15.4 percent, respectively, in 1983 to 10.3, 10.3, and 13.5 percent, respectively, in 1995.[22] The assumed financial

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[20] Energy Information Administration, Generating Unit Reference File (GURF), computerized data base maintained by the Office of Coal, Nuclear, Electric, and Alternate Fuels (Washington, DC).

[21] Oak Ridge National Laboratory, Technology Division, CONCEP-5 User's Manual, ORNL-5470 (Oak Ridge, TN).

[22] ICF Incorporated, National Utility Financial Statement Model (NUFS) Volume 1: Model Overview and Description, ORNL/Sub/82-18806/1.

structure of electric utilities in terms of debt, preferred equity, and common equity ranges from 52.5, 12.0, and 35.5 percent, respectively, in 1983 to 53.0, 12.0, and 35.0 percent, respectively, in 1995.

Table F3. Capital Costs by Type of Generating Capacity, Federal Region 5 (1983 Dollars per Kilowatt)

Generating Capacity	Cost
Oil/Gas Steam	731
Coal-fired Steam without FGD	
Bituminous--Low Sulfur	838
Subbituminous--Low Sulfur	865
Lignite--Low Sulfur	919
Coal-fired Steam with FGD	
Bituminous--Low Sulfur	929
Bituminous--Medium Sulfur	943
Bituminous--High Sulfur	1,001
Subbituminous--Low Sulfur	958
Subbituminous--Medium Sulfur	970
Lignite--Low Sulfur	1,017
Lignite--Medium Sulfur	980
Combined Cycle--Gas	469
Turbines--Gas	219
Turbines--Distillate	236
Nuclear Power	1,581
Hydroelectric Power	1,357

Interregional and International Electricity Trade

Transfers of electricity among utilities are adjusted for transmission losses by using an assumed loss factor of 9 percent. Assumptions with respect to net imports of electricity from Canada and Mexico are based on forecasts for 1990 by the Economic Regulatory Administration (Table F5). Interregional transfers of domestically produced power are determined exogenously to reflect the need to balance domestic production and sales to ultimate consumers. Changes in interregional transfers are projected to reflect scheduled plans.

Oil and Natural Gas Resource and Production Assumptions

World Oil Price. Table 1 (Chapter 7) gives the historical and projected average landed prices of imported crude as estimated using EIA's OMS Model. The domestic crude oil and refiner acquisition costs of crude are assumed to equal the world oil price.

Oil and Natural Gas Resource Levels. The levels of new reserve discoveries are determined as the incremental return to cumulative drilling. The exponential declines in production from producing fields were estimated from historical data. Alternative functions, using parameters based on the United States Geological

Survey (USGS) estimates of undiscovered recoverable resources,[23] were employed when the recent finding rates did not decline (as occurred in the Western Overthrust Belt) or the historical trend led to unuseable results.

Table F4. Annual Shares of Plant Construction Expenditures, Region 5 (Percent)

Plant Type	Years Before Commercial Operation													
	15	14	13	12	11	10	9	8	7	6	5	4	3	2
Nuclear														
10-Year Lead Time	--	--	--	--	--	0.2	2.5	9.7	20.2	26.9	23.5	12.8	3.7	0.4
12-Year Lead Time	--	--	--	0.1	1.2	5.0	11.6	18.9	22.7	20.3	13.1	5.6	1.4	0.1
14-Year Lead Time	--	0.0	0.7	2.8	6.9	12.3	17.3	19.6	17.7	12.7	6.8	2.6	0.6	0.1
15-Year Lead Time	0.0	0.5	2.1	5.4	9.9	14.6	17.8	17.9	14.8	9.8	5.0	1.8	0.4	0.0
Coal	--	--	--	--	--	--	--	0.4	2.3	9.7	29.1	27.5	19.1	12.0

-- = Not applicable.

Leasing, Regulations, and Environmental Policies. The leasing of Federal property for the exploration and development of energy resources will not be a constraint on domestic energy production through 1995. In addition, current environmental regulations are assumed to remain in force throughout the forecast period. State-level regulations, including well-spacing, prorationing, allowable production rates, and unitization, are assumed to continue in their current form.

Crude Oil Windfall Profit Tax Act. This law includes a definition for each category of oil, a base price, and a tax rate to be applied. The rate is applied to the difference between the base price and the market price, less a deduction for severance tax liabilities on the windfall profit tax portion of the price. The windfall profit attributed to any barrel of crude oil is limited to 90 percent of the net income attributed to that barrel. The treatment given to each of the crude oil categories is as follows:

[23] U.S. Geological Survey, "Estimates of Undiscovered Recoverable Conventional Resources of Oil and Gas in the United States," Circular 860 (Washington, DC, 1981)

- Old oil: The development of old oil is estimated using the windfall profit tax (WPT) parameters appropriate to major producers.
  - Rate: 70 percent
  - Base: $12.81 adjusted for inflation since June 1979 ($17.50 per barrel in 1984 dollars)

- New oil: The exploration for and development of newly discovered oil incorporates the following WPT parameters.
  - Rate: 30 percent in 1981, declining to 15 percent in 1985 and thereafter
  - Base: $16.55 per barrel plus inflation since second quarter of 1979, plus 2 percent real increase per year ($25.00 per barrel in 1984 dollars)

- Alaskan oil: The WPT imposed on current production from Cook Inlet and the Sadlerochit formation of the Prudhoe Bay field is the same as that for old oil. All other Alaskan oil discovered after 1979 is exempt from the WPT.

Table F5. Assumptions on Net Interregional Transfers of Electricity, 1990 (Trillion Btu)

	Source										
Destination	Canada/ Mexico	1	2	3	4	5	6	7	8	9	10
1	42.1	--	15.4	--	--	--	--	--	--	--	--
2	122.2	--	--	79.8	--	--	--	--	--	--	--
3	--	--	--	--	--	--	--	--	--	--	--
4	--	--	--	--	--	--	8.1	3.4	--	--	--
5	14.7	--	--	62.0	14.7	--	--	--	29.0	--	--
6	--	--	--	--	--	--	--	3.8	--	--	--
7	--	--	--	--	--	0.3	--	--	6.6	--	--
8	9.2	--	--	--	--	--	--	--	--	--	--
9	31.2	--	--	--	--	--	27.3	--	--	--	81.1
10	7.8	--	--	--	--	5.8	--	--	158.2	--	--

-- = Not applicable.

Investment Decisions and Discount Rates. Investment decisions are based on the return adjusted for the windfall profit tax on new oil and the assumption of constant expected future prices. Revenue values in the discounted cash flow (DCF) computation include revenues from coproducts. The discount rates used in the DCF calculations in the PROLOG Model are generally 10 percent for developmental drilling projects and 12 percent for exploratory drilling projects. From 1982 to 1984, the discount rates are 15 and 20 percent for developmental and

exploratory drilling projects, respectively. The higher rates reflect the influence of greater uncertainty in those years surrounding the world oil price and the regulatory environment in the natural gas market.

Exploration and Production Costs. Geological and geophysical costs, lease equipment costs, and operating costs all are estimated from the EIA Annual Survey of Oil and Gas. These cost components, as well as drilling costs, are assumed to increase by 3 percent annually in real terms over the forecast period. Marginal lease acquisition costs are assumed to be zero.

Alaska. Due to the repeated postponement of the expected start date for Prudhoe Bay gas production and the high degree of uncertainty surrounding several key issues, particularly financing of the pipeline, Alaska is not assumed to supply gas in the forecast period.

Projections of Alaskan oil production are based on a detailed review of the industry announcements rather than an explicit model run. Table F6 shows production under the base case scenario. The Prudhoe Bay base case flow matches Case I from the report, "Three-Dimensional Model, Waterflood Performance Study, Sadlerochit Formation, Prudhoe Bay field, Alaska," prepared for the Alaska Oil and Gas Conservation Commission by H. K. Van Pollen and Associates, Inc., April 1983. Other volumes reflect announced flow rates or figures recommended by the Department of Revenue, State of Alaska; final determination of the published forecasts is the sole responsibility of EIA staff. It is assumed that flows in excess of 2 million barrels per day are technologically and economically feasible through the Trans-Alaska Pipeline System. All announced plans were incorporated into the high world oil price case (not shown). Lower prices have the effect of delaying or outright eliminating selected projects, rather than reducing flows from included projects.

Assumptions for the Low, Base, and High Petroleum Supply Cases

The high and low supply assumptions for the Lower 48 States onshore production essentially provide best and worst cases for the supply of oil and natural gas (Table F7). For the Lower 48 onshore supplies, the PROLOG Model was executed with changes to costs growth, discount rates, and shifts in the yield to exploration--the finding rate. For other supply areas, a direct percentage adjustment was applied to the oil production and gas reserve additions from the outer continental shelf (OCS), enhanced oil recovery (EOR), and unconventional gas recovery (UGR). Due to the few large projects anticipated for Alaska, a judgmental approach was used to retain or exclude selected projects. The high and low supply cases conform to the high and low world oil price scenarios presented above.

Petroleum Market, Import, and Refining Assumptions

Road-Use Taxes. Gasoline and on-highway diesel prices reflect State and Federal taxes. For diesel fuel oil, the Federal tax increased from 9 cents to 15 cents per gallon on August 1, 1984.

Table F6. Alaskan Oil Production Middle World Oil Prices
(Thousand Barrels per Day)

	North Alaska										
	Prudhoe Bay Area										
Year	Sadlerochit Base	Sadlerochit EOR	Kuparuk	Lisburne Formation	West Sak	Milne Point	Duck Island	Seal Island	Other Beaufort	Total	South Alaska
1981 ...	1,522	--	3	--	--	--	--	--	--	1,525	88
1982 ...	1,532	--	89	--	--	--	--	--	--	1,621	80
1983 ...	1,537	--	109	--	--	--	--	--	--	1,646	71
1984 ...	1,535	--	115	--	--	--	--	--	--	1,650	62
1985 ...	1,535	--	170	--	--	--	--	--	--	1,705	52
1986 ...	1,545	--	210	--	--	10	--	--	--	1,765	47
1987 ...	1,545	--	250	100	--	30	--	--	--	1,923	42
1988 ...	1,545	--	250	100	50	30	--	--	--	1,975	36
1989 ...	1,545	--	250	100	93	30	--	--	--	2,018	32
1990 ...	1,545	25	250	100	137	30	52	--	--	2,139	28
1991 ...	1,250	25	197	100	180	30	58	--	--	1,840	24
1992 ...	1,011	25	155	100	180	30	63	52	--	1,616	20
1993 ...	818	25	122	100	180	30	69	58	--	1,402	16
1994 ...	662	25	97	100	180	30	75	63	100	1,332	12
1995 ...	536	25	76	100	180	30	81	75	100	1,203	8

-- = Not applicable.

Imports. Refined product imports are generally assumed to constitute the same regional proportion of demand as in 1983, as described in the EIA 1983 Petroleum Supply Annual. However, the refinery yield of residual fuel is constrained to not exceed 7.1 percent and the combined yield of LPG and petrochemical feedstocks is not allowed to exceed 6 percent (the yields reported in the EIA 1983 Petroleum Supply Annual). Increases in demand which would require higher yields for these products are supplied by imports.

Petroleum Product Prices. Retail prices represent the summation of the refiner's price and a total markup. Separate refining costs, wholesale markups, and retail markups are not modeled explicitly.

Refinery prices depend on the refiner acquisition cost of oil (RAQ), production levels of individual products, and capacity utilization. Prices are normalized so that the average refiner price (in 1984 dollars per barrel) does not drop below a level determined by the following equation:

$$(1 + 0.1 * M) * RAQ + 2.77 * M$$

The variable M is the ratio of throughput in the projection year to throughput in 1983.

Table F7. Petroleum Supply Assumptions
(Percent)

Assumptions	Supply Case		
	Low	Base	High
Costs			
(annual rate of growth)	6	3	0
Discount Rate			
Exploration	20	12	10
Development	15	10	8
Finding Rates			
Lower-48 Onshore and OCS			
(percentage change from base)	-10	0	10
Enhanced Oil Recovery			
(percentage change from base)	-10	0	10
Unconventional Gas Recovery			
(percentage change from base)	-10	0	10

In 1983, refinery prices for each product are subtracted from retail prices, thus generating total markups. Regional- and sector-specific markups are estimated. Once generated, the markups are fixed in real terms throughout the forecast period.

Capacity Utilization. Regional production of petroleum products is adjusted so that the capacity utilization rate is the same across Regions 1 through 7 and between Regions 9 and 10. Total refinery fuel use is directly proportional to refinery throughput and consists of still gas, petroleum coke, natural gas, and residual fuel oil. Refinery fuel use of natural gas and residual fuel oil are sensitive to the prices of these fuels.

Natural Gas Market Assumptions

Wellhead Price Regulation. The forecasts included in this volume are based on the assumption that the wellhead price ceilings on certain types of natural gas imposed by the Natural Gas Policy Act of 1978 (NGPA) will be removed according to the schedule contained in the Act.

Wellhead Prices and Purchases. Wellhead prices for gas in 1981, 1982, and 1983 that was in production in 1980 were obtained from the Form EIA-758 ("Natural Gas Producer/Pipeline Contract Report") and Purchased Gas Adjustment data. It is assumed that contracts with "market-out" clauses (which allow a purchaser to refuse to purchase gas that cannot be marketed) are reset to the market price each year. It is assumed that all contracts signed after 1980 have market-out clauses, and that downward pressure on prices due to the current surplus inhibits price

increases under pre-1981 contracts. The current gas price forecasts are based on the results of negotiations that are known to have already taken place.

Prices for some pipeline system NGPA categories were adjusted based on market-out actions detailed in "Gas Industry Actions by Field Purchasers to Reduce Gas Costs" and published by the American Gas Association. These adjustments were assumed to remain in effect until January 1, 1985.

Wellhead Contract Provisions. Data from the EIA Natural Gas Pipeline/Producer Contracts: A Preliminary Analysis (DOE/EIA-0312) and the Form EIA-758 were used to provide the distribution of contract escalation clauses for existing contracts or contracts in effect prior to 1981.

Contracts in effect in 1980 for gas for which the price is currently controlled are divided between those with clauses specifying a fixed escalation so the price is known in advance, referred to as "definite only" pricing, and those with clauses specifying highest allowed regulated rates, based on data from Form EIA-758. Prices for the "definite only" category came from Form EIA-758. Gas priced under a highest allowed regulated rate receives the NGPA ceiling price until deregulation.

New contracts (post-1980) for gas under price ceilings are categorized as having a highest allowed regulated rate clause and receive the NGPA ceiling price until decontrol. All new contracts for gas not under price ceilings receive the market clearing price.

When gas under existing contracts is decontrolled, most clauses with the highest allowed regulated rates provide for alternative pricing clauses upon deregulation. Information on deregulation pricing is taken from Form EIA-758, and contracts are divided into five categories: oil parity clauses without market-out provisions, most-favored-nation clauses without market-out provisions, all other deregulation clauses (including oil parity and most-favored-nation with market-out provisions), highest allowed regulated rate with no deregulation clauses, and "definite only" pricing.

Upon decontrol, gas covered under contracts with oil parity clauses with no market-out clause is assumed to receive a price equivalent to 110 percent of the price of distillate fuel oil. Gas sold subject to most-favored-nation clauses with no market-out provisions is adjusted over each year to the price of oil-parity contracts with a 1-year lag. However, because of the downward pressure on prices as a result of the current surplus of natural gas, price increases under these contracts are limited. All other deregulated gas receives, by assumption, the new contract price in the first year, with the price adjusted each year as contractually specified adjustments take place to reflect the new contract price each year.

Under a market-out clause, which is assumed to be included in all contracts signed in or after 1981, a pipeline can refuse to take delivery of gas it cannot market, but the producer has the right to seek alternate buyers. It is assumed that gas covered by market-out clauses would be priced at the market price for new gas supplies.

All wellhead prices are calibrated to national level totals in EIA's Natural Gas Monthly and Purchased Gas Adjustment filings.

Take-or-Pay. Take-or-pay requirements for any new (post-1980) contract are assumed to be 75 percent of the well deliverability. For contracts in effect in 1981, pipeline take-or-pay percentages are assigned to each category of gas using the Form EIA-758 data. The take-or-pay percentages applied to reserve categories for the period from 1982 through 1984 have been adjusted according to actions reported in "Gas Industry Actions" mentioned above. These adjustments were assumed to remain in effect until January 1, 1985.

Distributor Pricing. Some public utility commissions are permitting a lesser share of the distribution costs of gas to be passed to industrial and electric utility customers who would otherwise switch to oil (see EIA, Competition and Other Current Natural Gas Issues in the Natural Gas Market, DOE/EIA-0489). A number of entities, including pipelines, are actively engaged in the intense marketing of gas, such as facilitating the sale of gas directly from producers to customers and special discount programs.

Flexible pricing by distributors is assumed for industrial and electric utility gas users that can switch to oil. If the usual calculated tariff to these users results in the price being higher than the regional residual fuel oil price, these consumers are assumed to receive gas prices at parity with the price of residual fuel. However, prices to these customers are not reduced below the distributor's average purchased gas costs minus 50 percent of the average charge for transmission (35 cents per million Btu). When prices to these customers are reduced, half of the revenue loss by large distributors is passed to gas users that do not have the option of quickly switching to oil.

Lower 48 Reserves and Production by NGPA Section. Analysis of the supply outlook requires detailed data on prices, reserves, and production for each NGPA category and for each pipeline system. These data are not available from a single source; consequently, several data sources were used either directly or to allocate the information to the level of detail required.

Reserves, production, and price data were developed for 17 domestic pipeline systems. Reserves and production data were obtained from two sources, Forms FERC-15 and EIA-23. The Form FERC-15 data include reserves and production information reported by interstate pipeline companies for different geographic areas. The Form EIA-23 survey, a sample of oil and gas operators stratified by size, contains data on total reserves and production for each State.

To allocate reserves and production by NGPA category, two additional data systems were used. The Purchase Gas Adjustment data provide projected wellhead purchase volumes by NGPA Category for 20 interstate pipeline companies. These were used to allocate reserves and production for those 20 companies, using the ratio of purchases by NGPA section to total purchases. The remaining interstate companies and intrastate area reserves were apportioned in a similar manner, using Form FERC-121 data system which includes data on production by region, company, interstate or intrastate market, and NGPA category and subcategory. These data were then benchmarked to historical reserves and production levels for the period 1980 through 1983.

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Natural Gas Imports. In July 1984, the Canadian Government announced a new policy where "exporters of Canadian gas will be free to negotiate prices with their customers." This statement along with the U.S. policy on gas imports leads to the assumption that the price of imported gas will reflect current market conditions. Currently, the Canadian Government has authorized about 13 trillion cubic feet of its reserves for export to the United States but could easily authorize more. Three gas import scenarios have been specified (Table F8).

Table F8. Natural Gas Import Assumptions
(Trillion Cubic Feet)

Year	Low Case	Base Case	High Case
1984	0.9	0.9	0.9
1985	1.0	1.0	1.0
1986	1.0	1.1	1.3
1987	1.0	1.2	1.5
1988	1.1	1.3	1.7
1989	1.2	1.4	1.9
1990	1.3	1.6	2.3
1991	1.3	1.7	2.4
1992	1.3	1.8	2.5
1993	1.3	1.9	2.6
1994	1.3	2.0	2.6
1995	1.3	2.1	2.7

Coal Assumptions

Exports.[24] Export projections are derived from EIA's International Coal Trade Model (ICTM). It is assumed that U.S. rail transportation rates for export coal will remain deregulated. No U.S. ports are assumed to be deepened. However, topping-off operations are permitted in loading large colliers at U.S. ports.

Emission Standards. Utilities are assumed to meet regional standards based on 1982 air pollution control regulations. Utilities that do not have scrubbers are required to meet one of the following standards in terms of the maximum sulfur content of the coal used:

[24] Energy Information Administration, Description of the International Coal Trade Model, DOE/EI/11815-1 (Washington, DC, 1982).

Emission Standard (lbs. SO_2/MBtu)	Coal Sulfur Categories (lbs. sulfur/MBtu)
0.68 - 0.80	0.00 - 0.40
0.81 - 1.20	0.41 - 0.60
1.21 - 1.66	0.61 - 0.83
1.67 - 3.34	0.84 - 1.67
3.35 - 5.00	1.68 - 2.50
Over 5.00	Over 2.50
NSPS	0.41 - 0.60

For plants meeting Revised New Source Performance Standards (NSPS), the choice of which coal sulfur category to burn is based on the delivered costs of the different coals less an adjustment factor. This adjustment factor is a regional credit for use of a lower sulfur coal than required to meet the standard. The credit reflects the reduction in plant operating costs resulting from scrubbing lower sulfur coal. However, the utility is charged the delivered cost of the coal chosen.

Utility Coal Use. Plants that have a contract for coal shipments in 1983 are assumed to burn that coal in 1983. In the forecast years, the contract shipment is decremented based on depletion of individual mine reserves. The size of the decrement is based on the estimated life remaining for mines existing in 1980 (for both surface and deep mines) in each region. Plants that do not have a contract for coal shipments select the most economical coal type that satisfies the environmental standards they are required to meet.

Industrial Coal Use. Industrial boilers existing as of 1974 are considered to be "old" and are assumed to reduce coal consumption by 3 percent per year. These industries are allowed to burn high-sulfur coal. Those boilers which came on line after 1974 are characterized as "new" and are allowed to use only low-sulfur coal.

Metallurgical Coal Use. Metallurgical coal demand is assumed to be met by a blend of 86 percent premium-grade coking coal and 14 percent marginal-grade coking coal. This quality distribution was estimated for 1975 oven-coke plant consumption by Eugene T. Sheridan, in the U.S. Bureau of Mines Special Publication, "Supply and Demand for United States Coking Coals and Metallurgical Coke," 1976, p. 10.

Transportation Rates. Domestic rail rates, which are functions of fuel costs, right-of-way rehabilitation costs and volume, are assumed to increase from 1985 to 1995 by 20 percent. Over this period, fuel costs are projected to increase by 4.3 percent, and the other costs are assumed to increase by a total of 15 percent. Barge and collier rates are functions of fuel costs; barge rates are also functions of volume. Both barge and collier rates are assumed to increase from 1985 to 1995 by 15 percent due to fuel cost increases. Barge rates also increase by about 1 percent due to volume.

Model List and Contacts

Intermediate Future Forecasting System (IFFS): Office of Energy Markets and End Use

Oil/Gas:	Susan Shaw	(202) 252-1468
Coal:	Reginald Sanders	(202) 252-1466
Electricity:	Reginald Sanders	(202) 252-1466
Macroeconomics:	William Curtis	(202) 252-1455
Residential:	John Holte	(202) 252-1471
Commercial	John Holte	(202) 252-1471
Industrial	Paul Werbos	(202) 252-1197
Transportation:	Barry Cohen	(202) 252-5359
Refineries:	Michael Lehr	(202) 252-1470

Oil Market Simulation (OMS) Model: Office of Energy Markets and End Use
Erik Kriel (202) 252-6572

Outer Continental Shelf Oil and Gas Supply Model (OCSM): Office of Oil and Gas
William Trapmann (202) 252-6408

Gas Analysis Modeling Systems (GAMS): Office of Oil and Gas
Barbara Mariner-Volpe (202) 252-4749

Production of Onshore Lower-48 Oil and Gas (PROLOG) Model: Office of Oil and Gas
William Trapmann (202) 252-6408

Resource Allocation and Mine Costing (RAMC) Model: Office of Coal, Nuclear, Electric, and Alternate Fuels
Robert Crockett (202) 252-4266

Coal Supply and Transportation Model (CSTM): Office of Coal, Nuclear, Electric, and Alternate Fuels
Jarvis Seely (202) 252-6853

International Coal Trade Model (ICTM): Office of Coal, Nuclear, Electric, and Alternate Fuels
Ercan Tukenmez (202) 252-5253

Conceptual Capital Cost Model (CONCEP): Office of Coal, Nuclear, Electric, and Alternate Fuels
Arthur Fuldner (202) 252-9852

National Utility Financial Statement (NUFS) Model: Office of Coal, Nuclear, Electric, and Alternate Fuels
Gerald Price (202) 252-9854

QUESTIONS FROM SENATOR BINGAMAN

Annual Energy Outlook

Question 2: The Annual Energy Outlook for 1984 projected an almost doubling of import requirements between now and 1995 under almost any scenario. This increased reliance on foreign petroleum has important ramifications for our nation's security interests and energy policy and planning.

How reliable do you think these projections are?

How can this information be used more effectively in setting national energy policy?

How is this information used in policy planning and in protecting our security interests?

How can energy forecasting be improved to better anticipate future needs?

Answer: The Annual Energy Outlook for 1984 contains a range of projections for oil imports into the United States between now and 1995, as well as a set of sensitivity analyses that explore specific uncertainties about the factors that affect imports. As the Annual Energy Outlook states clearly in its introduction and throughout the text, its primary message is that future oil imports (and other aspects of energy markets) depend on a number of influences that cannot be projected with certainty.

We do not share the view that the Annual Energy Outlook projects a doubling of imports between now and 1995 under almost any scenario. Rather, the Annual Energy Outlook describes potential scenarios that lead to a wide range of possible outcomes. If an unlikely set of conditions involving

unusually high economic growth or extremely depressed oil prices were to come about, then imports could double. Under more plausible conditions, including continuation of recent trends in oil production and conservation, the import situation in 1995 could be very little different than it is today. More specifically, the range of oil import levels implied for 1995 by the basic scenarios constructed in the Annual Energy Outlook is 5.2 to 11.7 millions of barrels per day. Continuation of recent conservation trends or favorable but quite plausible assumptions about factors affecting oil supply could hold imports to a range of 5.6 to 6.5 millions of barrels per day.

The Energy Information Administration projections are published and made available to anyone who finds them useful, including the Congress and policymakers in the Department of Energy. The projections contribute to the national debate about energy policy and security interests, particularly because they emphasize the uncertainty of projections of the future and sort out in systematic ways the factors that influence likely energy developments. That, of course, is the limit of the Energy Information Administration's involvement in the policymaking process. The Energy Information Administration tries to provide the best information it can to policymakers, but does not formulate policy.

I believe that the Energy Information Administration, by and large, has done as good a job as anyone in forecasting energy

demand and supply. However, this is not to say that there is no room for improvement. We do not fully understand the dynamics of energy demand and, in particular, how oil consumption is likely to be affected by falling oil prices, changes in the structure of the economy, or competition from other fuels. The Energy Information Administration is working to improve its understanding of these factors and its capability for modeling patterns of energy consumption. The Manufacturing Energy Consumption Survey now under development will fill an information gap in a sector of the economy that has proven very hard to forecast. Projection of oil supply is also fraught with uncertainty, which in large part derives from the irreducible uncertainty of petroleum geology and the results of exploratory drilling. Therefore, I am not sure that much can be done to greatly improve the reliability of oil production forecasts.

QUESTIONS FROM MINORITY

Question 1: How much money is available in the FY 1985 and FY 1986 Energy Information Administration (EIA) budget for analytical work on natural gas markets? Please describe EIA's plans to monitor and analyze natural gas markets. Have you recently decided to downgrade forms 758(a) and (b) relating to natural gas contracts from a biennial survey to a one-time survey? If so, why? What period will the new survey cover? Why wouldn't we be interested in other periods?

Answer: The Energy Information Administration budget for natural gas analytical work in FY 1986, like other operational budgets, is designed to remain flexible as long as possible. As a result, the funding levels currently identifiable must be understood to be subject to change as projects are completed or new efforts are identified.

The overall FY 1985 contracts funding level for natural gas data development and analysis is $890,000. This represents the amount of money approved for commitment in FY 1985 for projects to be conducted entirely within FY 1985 or to be started in FY 1985 and completed in FY 1986. The specific areas identified for FY 1985 are:

Initiate data collection for "Monthly Report of Natural Gas Purchases and Deliveries to Customers"
Initiate Natural Gas Contracts Study
Initiate Study of Contract Carriage Issues
Validate Production of Onshore Lower-48 Oil and Gas Model (PROLOG)
Update Enhanced Oil Recovery Model (EOR)
Update Outer Continental Shelf Model (OCS)
Improve efficiency and utility of Gas Analysis Modelling System (GAMS)
Complete Integrated Natural Gas Data Base Development
Complete Wells Completion Estimation Project
Upgrade capability to coordinate supply/demand efforts with Annual Energy Outlook
Support EIA Tax Analysis Study (Congressional Request)

The FY 1986 contracts funding level for natural gas data development and analysis is approximately $500,000. Specific areas identified for FY 1986, although not complete, include:

Completion of Natural Gas Contracts Study
Completion of Study of Contract Carriage Issues
Completion of upgrade of Enhanced Oil Recovery, Outer Continental Shelf and Production of Onshore Lower-48 Oil and Gas Models
Complete Gas Analysis Modelling System efficiency improvements

Other areas currently under consideration are:

Update the Alaska Hydrocarbon System (AHS)
Analysis of severance and other tax issues
Development of a data base descriptive of gas resources of Canada and Mexico and examination of the implications for the U.S.

The Energy Information Administration, in the natural gas area, as well as in other areas, develops an information/collection program to provide basic information concerning production, supplies, imports, distribution, and prices of energy commodities. The natural gas program uses information from individual data collection programs and other sources to monitor and analyze natural gas markets as new issues and questions arise. The Energy Information Administration does not currently plan to change this approach. For example, future analytical efforts will include studies on natural gas producer/purchaser contracts and contract carriage issues.

The natural gas contracts study (EIA Form 758) was originally conceived in calendar year 1983 and planned for initiation in calendar year 1984. This schedule envisioned the development of

an understanding of contract issues prior to January 1, 1985. On that date, the Natural Gas Policy Act provided for the deregulation of a sizeable portion of U.S. natural gas. As it turned out, the survey could not be completed prior to January 1, 1985. This delay, and the fact that gas contract renegotiations accelerated in early 1985, caused the Energy Information Administration to extend the data collection period through June of 1985.

We do not believe that the forms have been downgraded. The forms were recently redesigned to remove unnecessary detail, such as those categories which have proven to represent insignificant volumes (e.g., Devonian shale). The forms have been substantially improved in providing information on how contracts have adjusted to current market conditions through voluntary renegotiations. This is especially true, since virtually all new gas (post-Natural Gas Policy Act) was decontrolled on January 1, 1985.

The periods covered, calendar years 1983 and 1984 and the first six months of 1985, will provide ample coverage of contract changes in response to current market conditions. At this time, the Energy Information Administration feels that a one-time survey is appropriate. If market conditions and legislative initiatives warrant another study in the future, the Energy Information Administration would consider updating this survey.

QUESTIONS FROM MINORITY

Question 2: Please report to the Committee at the earliest convenient time your own estimate of the priority areas in need of funds to improve the quality of EIA data. Rank these areas in terms of the urgency of need and include the amounts of funding necessary in FY 1985 and FY 1986 to accomplish this upgrading.

Answer: As requested, an estimate of needed funds will be submitted later.

QUESTIONS FROM MINORITY

Question 3: In a recent Congressional Quarterly article (Jan. 12, 1985), Secretary Hodel was quoted as claiming "a 23 percent improvement" in U.S. energy efficiency since 1973. Similar statements appear in DOE's latest Annual Report to Congress and in Secretary Herrington's prepared testimony before various Congressional Committees.

The basis for the energy efficiency measure is the index of energy consumption per dollar of GNP published in the Energy Information Administration's Monthly Energy Review (MER). However, for several reasons, it seems changes in the index may reflect other factors as well as efficiency trends and the nature of our economic dependence on energy.

First, over the past decade, U.S. imports of many products and materials have increased substantially--consumer electronics, automobiles, and steel to name a few. Although we consume such goods here, the energy resources required to produce them are purchased and consumed offshore.

For example, when you compare the volume of steel imports in 1972 to 1982 levels, you can see the Japanese captured so much of the American steel market by 1982 that U.S. steel mill energy requirements declined by more than one Quad. In such a situation, the Japanese buy and use the energy but we buy and use the steel produced with that energy. Thus, our economy depends on the energy embodied in Japanese steel--and any other imported good--just like we depend on the energy used to produce goods and services in this country.

In a detailed private report on this matter, The Export of Energy Consumption: The profile of Industrial Energy Use dated March 1985, Daniel Yergin draws a parallel conclusion stating, "The fall in industrial energy consumption reflects a basic change in the way industrial societies use energy."

Second, according to the recently revised EIA State Energy Price and Expenditure Report, energy expenditures increased from 8.2 percent of GNP in 1972 to a peak of 14.2 percent in 1981 and then dropped to 12.2 percent in 1984. Such fundamental shifts in the ratio of energy to non-energy components of GNP cause changes in the energy consumption per GNP dollar index that bear no relationship to actual changes in energy efficiency.

What is your estimate of U.S. progress in energy efficiency since 1972 and the likely future trends when the index is revised to reflect our growing dependence on imports, the effect of changing energy costs on the index and our shifting dependence on alternative energy sources?

Please prepare a brief report on this matter by May 10. This report should include:

- The data required to adjust the index to more accurately reflect U.S. trends in energy efficiency, past and future.

- Your opinion on the desirability of modifying the present index.

- Your opinion on the merits and cost of a macroeconomic index that shows the trend in U.S. economic dependence on energy based on the constant dollar value of non-energy GNP produced per dollar of energy employed.

Answer: As requested, a report will be sent to the Committee by May 10, 1985.

QUESTIONS FROM THE MINORITY

Question 4: Is the Office of the Administrator of the Energy Information Administration currently in compliance with the personnel floors imposed by Congress in Appropriations Acts?

Answer: The statutory employment floor that applied to the Energy Information Administration by Public Law 97-257 was removed by Public Law 98-369. In his letter of August 8, 1984, to Chairman Yates, House Interior and Related Agencies Appropriations Subcommittee, Secretary Hodel expressed his commitment to allocate sufficient resources for effective mission accomplishment. The Department of Energy remains so committed.

QUESTIONS FROM MINORITY

Question 5: Has Energy Information Administration (EIA) done any analysis of the potential supply response for old gas? What is the status of the effort? When can we expect the work to be available?

Answer: The only work that has been done by the Energy Information Administration in this area was limited to the State of Texas. Of the three mechanisms that contribute to the addition of gas recoveries (lowering of abandonment pressures, infill drilling, well enhancements), only one, lowering of abandonment pressures, was the subject of analysis. My exposure to that work has convinced me that the most important of the three cited mechanisms is likely to be infill drilling, especially in heterogeneous reservoirs. That mechanism does not lend itself to systematic analysis. None of the supply response studies I am familiar with (Shell, Office of Technology Assessment) address that point in a direct and systematic fashion.

The Energy Information Administration study had the additional problem in that the scaling variables available in Texas are unavailable elsewhere. As a result, rather than coming out with a study that would be less than complete, the Energy Information Administration decided not to proceed with the project.

Department of Energy
Washington, D.C. 20585

May 10, 1985

Honorable James A. McClure
Chairman, Committee on Energy
and Natural Resources
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

This is a follow-up to my April 26, 1985, hearing before the Committee on Energy and Natural Resources on my nomination to the position of Administrator, Energy Information Administration of the Department of Energy. As I indicated in the post-hearing questions and answers enclosed with my April 29, 1985, letter to you, I am now providing answers to the Minority's questions number 2 and 3.

If I can provide any further information, please do not hesitate to call upon me.

Sincerely,

H. A. Merklein

Dr. H. A. Merklein

Enclosures

QUESTIONS FROM MINORITY

Question 2: Please report to the Committee at the earliest convenient time your own estimate of the priority areas in need of funds to improve the quality of EIA data. Rank these areas in terms of the urgency of need and include the amounts of funding necessary in FY 1985 and FY 1986 to accomplish this upgrading.

Answer: The areas in need of quality investments in Fiscal Year 1985 have been given the following priorities and allocation of the available $4,000,000:

1. Documentation, Frames and Performance Statistics..... $2,070,000

   This includes documentation of both data systems and models, upgrading the frames and universe lists that have deteriorated, and setting up mechanisms to maintain performance statistics on an ongoing basis.

2. Testing and Updating..... $ 915,000

   This includes testing operational accuracy and output of systems, updating data elements and edit procedures updating models, and developing computerized data linkages to provide consistency and efficiency.

3. Requirements and Special Studies... $ 360,000

   This includes analysis of the needs for specific data series, comparisons of related data series to ensure comparability, and implementation of some systems improvements.

4. Audits and Evaluations..... $ 655,000

This includes audits of data systems, evaluation of the performance of models and independent quality assessment of analyses, data reports, methodologies, and documentation.

Top priority items were funded first to ensure that backlogs in documentation and frames would be eliminated in FY 1985. Thus, in future years only corrections and updates to the documentation should be needed for existing systems. All frames will be sufficiently updated, or the updating process will have been initiated, to ensure the integrity of the data collections. Updating of two large frames started in FY 1985 will need to be completed with FY 1986 funds. Also the process of maintaining longitudinal performance statistics will have been initiated for all systems.

In the second category of testing and updating, three models and three data systems will have been appropriately updated and some cumbersome linkage procedures between data and models will have been streamlined.

In the third category of special projects, some investigations will have been conducted that are essential for the ultimate integrity of the data systems and models.

Finally, the coverage of audits and evaluations was enhanced to ensure that EIA's products meet good professional standards of quality.

We are currently in the process of determining priorities for the $2,500,000 requested for quality investments in FY 1986. We believe that, on an ongoing basis, $2,500,000 is an appropriate amount that will enable us to maintain the quality of our information base. The funding of $4,000,000 in FY 1985 was intended to remove a backlog of quality investments that had been built up in previous years. This backlog, for all practical purposes, will be eliminated by the end of the current year so that funding for quality investments beyond the requested $2,500,000 is not planned.

QUESTIONS FROM MINORITY

Question 3: In a recent Congressional Quarterly article (Jan. 12, 1985), Secretary Hodel was quoted as claiming "a 23 percent improvement" in U.S. energy efficiency since 1973. Similar statements appear in DOE's latest Annual Report to Congress and in Secretary Herrington's prepared testimony before various Congressional Committees.

The basis for the energy efficiency measure is the index of energy consumption per dollar of GNP published in the Energy Information Administration's Monthly Energy Review (MER). However, for several reasons, it seems changes in the index may reflect other factors as well as efficiency trends and the nature of our economic dependence on energy.

First, over the past decade, U.S. imports of many products and materials have increased substantially--consumer electronics, automobiles, and steel to name a few. Although we consume such goods here, the energy resources required to produce them are purchased and consumed offshore.

For example, when you compare the volume of steel imports in 1972 to 1982 levels, you can see the Japanese captured so much of the American steel market by 1982 that U.S. steel mill energy requirements declined by more than one Quad. In such a situation, the Japanese buy and use the energy but we buy and use the steel produced with that energy. Thus, our economy depends on the energy embodied in Japanese steel--and any other imported good--just like we depend on the energy used to produce goods and services in this country.

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Second, according to the recently revised EIA State Energy Price and Expenditure Report, energy expenditures increased from 8.2 percent of GNP in 1972 to a peak of 14.2 percent in 1981 and then dropped to 12.2 percent in 1984. Such fundamental shifts in the ratio of energy to non-energy components of GNP cause changes in the energy consumption per GNP dollar index that bear no relationship to actual changes in energy efficiency.

What is your estimate of U.S. progress in energy efficiency since 1972 and the likely future trends when the index is revised to reflect our growing dependence on imports, the effect of changing energy costs on the index and our shifting dependence on alternative energy sources?

Please prepare a brief report on this matter by May 10. This report should include:

- The data required to adjust the index to more accurately reflect U.S. trends in energy efficiency, past and future.
- Your opinion on the desirability of modifying the present index.
- Your opinion on the merits and cost of a macroeconomic index that shows the trend in U.S. economic dependence on energy based on the constant dollar value of non-energy GNP produced per dollar of energy employed.

Answer: The term "energy efficiency" can take on many meanings. Variation in the amount of energy consumed in the economy can be thought of as arising from three sources: (1) the level of output in the economy, (2) the mix of output, and (3) the technology associated with the production process at the most micro level of the economy. Given this categorization, there are numerous measures of "energy efficiency" which can be derived, each highlighting a particular perspective on the issue.

The Energy Information Administration publishes data and analyses of energy use and expenditure trends in several publications. Measures of up-to-date aggregate energy conservation trends are calculated and published in the Monthly Energy Review and the Annual Energy Review.

Data on energy expenditures by type of fuel and consuming sector are published annually in the State Energy Price and Expenditure Report. Projections of trends in energy use

relative to changes in economic activity appear in the Annual Energy Outlook.

Table 1 summarizes key aggregate indicators regularly available from Energy Information Administration data. The series for energy consumption per dollar of real Gross National Product is one often quoted measure of energy efficiency. It reveals a trend in the aggregate economy toward a declining use of direct energy in the production of the nation's output. As such it is a meaningful summary statistic. It highlights a trend in the economy but, as is true of any indicator series, it does not purport to tell the entire story.

The table also reveals that energy expenditures as a percent of the current dollar Gross National Product rose between 1973 and 1981 but since have begun to decline. We expect the share of energy expenditures to level off and remain stable through 1990 as the economy's response to the oil price explosions of the 1970's continues to unfold. Despite recent oil price declines, petroleum prices remain relatively high and encourage efforts to conserve and employ substitutes. After 1990, however, rising oil prices are projected to raise the share of energy expenditures.

Table 2 reproduces information published in the Monthly Energy Review which shows the relative shift in energy use away from petroleum and natural gas toward coal, nuclear, and other

energy. On a per capita basis, petroleum and natural gas use in 1984 is only about two-thirds of what it was in 1973. This development has contributed materially to our reduced dependence on oil imports (see Chart 1).

However, as noted at the outset of this report, the issue of energy efficiency can be approached from many perspectives. To shed light on different perspectives of the efficiency issue, the Energy Information Administration annually publishes Energy Conservation Indicators. A copy of the latest edition (October 1984) is attached. Conservation indicators are presented for the aggregate economy and for the four end-use sectors: residential, commercial, industrial, and transportation. While this publication by no means exhausts the possible ways of viewing energy efficiency trends, it does provide a more in-depth look at the issue than can be observed by simply looking at the energy/Gross National Product ratio or other summary energy use indicators.

The Energy Information Administration does not claim to exhaust all analytic opportunities in the study of energy efficiency issues. Indeed, through the publication of extensive statistical material, it seeks to facilitate the efforts of others. However, no need for basic revision in the Energy Information Administration's approach to analyzing energy efficiency issues is seen at this time. Several aggregate measures are regularly calculated and forecasted.

Committee Note.--The document "Energy Conservation Indicators 1983 Annual Report" has been retained in Committee files.

Supplementary measures can be developed as analytic need arises. Whether energy expenditure data are presented in a macroeconomic context in constant or current dollars is less important than making sure all comparisons are constructed in a coherent and consistently logical framework.

Adjustment of the Gross National Product to derive a non-energy component can be complex. Methodology may vary with intended use. Any such undertaking must be done with care to avoid double counting by mixing intermediate and final product concepts. Extensive work in this area is not planned at the Energy Information Administration.

The concept of energy embodied in our imports and exports of goods and services is an interesting one. However, aside from the work performed in the mid-seventies by the Center for Advanced Computation, only limited attention has been given to this area.

Conceptually, the United States economy receives energy in three ways:

(1) Primary energy extracted domestically,

(2) Imported energy (almost exclusively petroleum), and

(3) Energy embodied in imported goods and services.

Against this, energy is exported both directly and as embodied in goods and services.

According to the Center for Advanced Computation report, domestic energy extraction totaled 57.6 quads in 1967. Direct imports totaled 6.7 quads, while direct energy exports equaled 2.3 quads. Energy embodied in imported goods and services totaled 2.6 quads while energy embodied in exported goods equalled 3.2 quads. Thus, in 1967 we exported 0.6 quads of energy in the context of our non-energy trade account.

The sources for these types of calculations are grounded in the benchmark input-output tables constructed by the Bureau of Economic Analysis for the years 1963, 1967, and 1972. The Center for Advanced Computation analysis identifies two trends of particular relevance: First, the percentage of embodied energy to total energy has risen in each of the benchmark years, from 3.5 percent (1963) to 3.9 percent (1967) to 4.7 percent (1972). Second, whereas net exports of embodied energy were positive in all three years (thus helping to offset the negative trade in direct energy), this positive value steadily declined.

There is every reason to believe that the deteriorating trade balance of the United States in recent years (see Table 3) has resulted in increased imports of embodied energy. From the standpoint of total domestic energy use, such imports offset declines in consumption reported earlier. Imported steel and imported automobiles, to the extent they displace domestic output, would tend to reduce, for the most part, domestic coal

and electricity requirements. However, the basic shift away from oil and natural gas use, evident in the data reported above, would not be offset by developments involving the importation of embedded energy in these products. Nor would our reduced import dependence be offset.

Table 1

Alternative Aggregate Energy Efficiency Measures
(Percentage Change from 1973 in parenthesis)

	1973	1981	1984	1990	1995
Total Energy Consumption (Quadrillion Btu)	74.3	74.0 (-.4)	73.7 (-.8)	83.5 (12.4)	90.1 (21.3)
Real GNP (Billions, 1972 Dollars)	1254.2	1512.1 (20.6)	1639.3 (30.7)	1968.0 (56.9)	2206.0 (75.9)
Energy/GNP Ratio	59.2	48.9 (-17.4)	45.0 (-24.0)	42.4 (-28.4)	40.9 (-30.9)
Oil and Natural Gas/GNP	45.7	34.3 (-24.9)	29.9 (-34.6)	26.7 (-41.6)	24.9 (-45.5)
Other Energy/GNP	13.5	14.6 (8.1)	15.1 (11.9)	15.8 (17.0)	15.9 (17.8)
Energy Expenditures (Billions of Current Dollars)	111.4	420.3 (277.3)	450.0 (303.9)	NC[1]	NC[1]
Expenditures/GNP (Current Dollar Share)	8.4	14.2 (69.0)	12.3 (46.4)	NC[1]	NC[1]

[1] Forecast data not calculated on same basis as historical data at present. In general, the Annual Energy Outlook (1984) projects a stable share of energy expenditures through 1990; after 1990 rising oil prices are projected to increase the share.

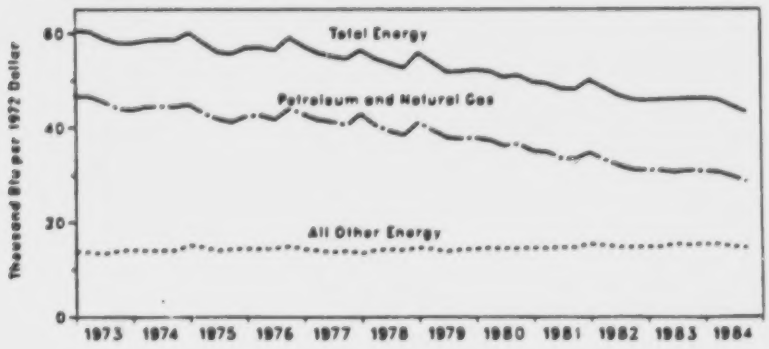
Table 2

Energy Summary

Energy Indicator—Energy Consumption per Dollar of Gross National Product (Seasonally Adjusted)

		Annual Rate of Energy Consumption	Gross National Product (GNP)	Energy Consumption per Dollar of GNP (Seasonally Adjusted)		
				Total Energy	Petroleum and Natural Gas	All Other Energy
		Quadrillion Btu	Trillion 1972 dollars	Thousand Btu per 1972 dollar		
1973		74.398	1.354	59.3	45.7	13.6
1974		72.648	1.346	58.3	44.3	13.9
1975		70.551	1.332	57.3	42.8	14.5
1976		74.366	1.396	57.3	42.8	14.5
1977		76.293	1.370	55.7	41.6	14.1
1978		78.091	1.439	54.3	40.3	14.0
1979		78.900	1.479	53.3	39.1	14.2
1980		75.965	1.475	51.5	37.0	14.5
1981		73.969	1.512	48.9	34.3	14.6
1982		70.843	1.490	47.9	32.9	15.0
1983	1st Quarter[1]	69.231	1.491	46.9	31.0	14.8
	2nd Quarter[1]	70.000	1.525	45.9	31.0	14.9
	3rd Quarter[1]	71.250	1.550	46.0	30.6	15.4
	4th Quarter[1]	72.453	1.573	46.1	30.9	15.2
	Year	70.697	1.535	46.0	30.9	15.0
1984	1st Quarter[1]	R74.495	1.611	R46.2	30.9	R15.4
	2nd Quarter[1]	R75.278	1.639	45.9	30.6	15.3
	3rd Quarter[1]	R73.383	1.645	44.6	29.7	14.9
	4th Quarter[1]	R71.780	R1.662	43.2	28.6	14.6
	Year	R73.723	R1.639	45.0	29.9	15.1

Quarterly Energy Consumption per Dollar of Gross National Product[1] (Seasonally Adjusted)



[1]Quarterly data are seasonally adjusted and shown at annual rates.
R = Revised data.
Notes • Geographic coverage is the 50 States and the District of Columbia.
• Yearly data may not equal average of quarters due to seasonality adjustments and independent rounding.
Sources • See the last page of the section.

Chart 1

Dependence on Foreign Oil - Stock Adjusted, 1973-1984

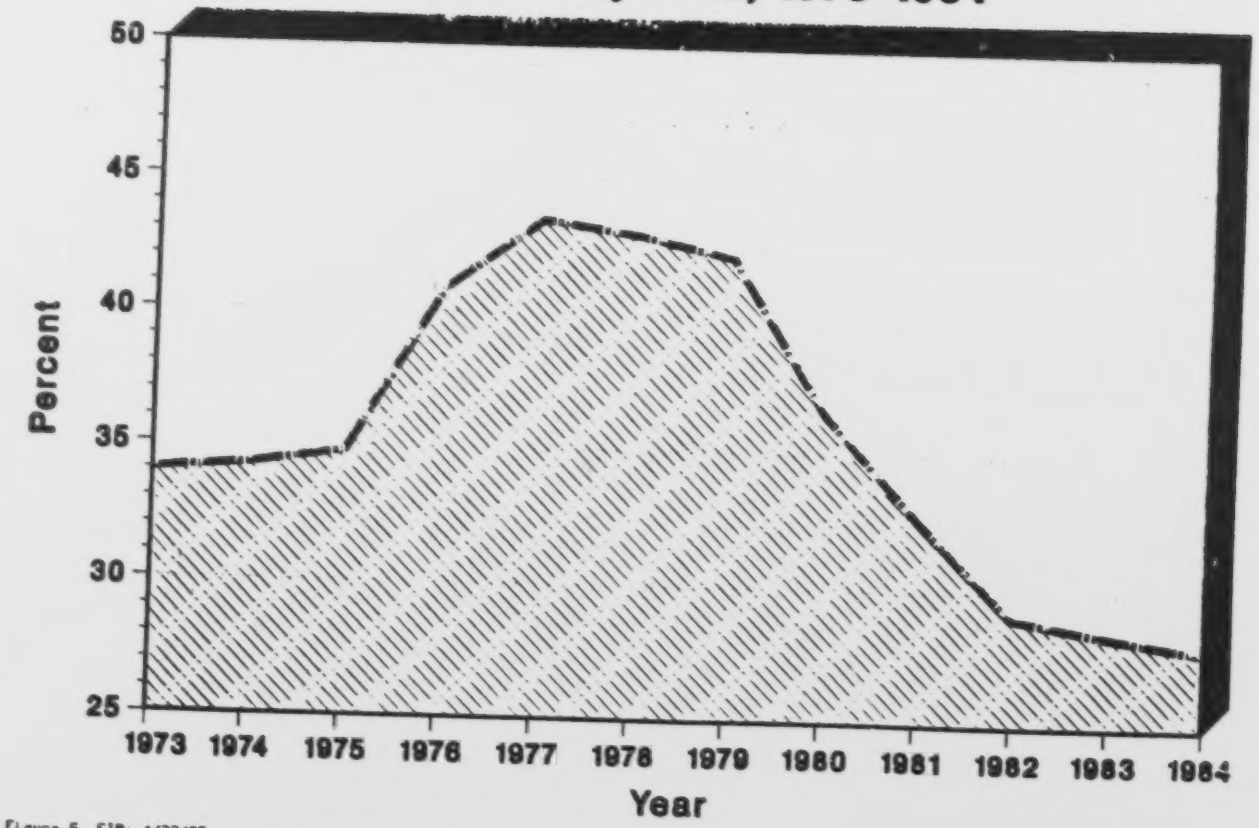


Figure 6, EIR: 4/22/85

Table 3

Energy Summary

Merchandise Trade Value

		Exports			Imports			Trade Balance		
		Energy	All Other	Total	Energy	All Other	Total	Energy	All Other	Total
					Million dollars					
1974	Total	NA	NA	98,092	NA	NA	103,599	NA	NA	-4,487
1975	Total	4,470	103,182	107,652	29,325	70,178	99,503	-23,855	+33,004	+8,149
1976	Total	4,226	110,997	115,223	26,384	97,093	123,477	-32,158	+23,904	-8,254
1977	Total	4,184	117,048	121,232	47,153	103,237	150,390	-42,969	+13,811	-29,158
1978	Total	3,882	139,799	143,681	44,783	129,984	174,767	-40,881	+9,805	-31,076
1979	Total	5,675	176,185	181,860	63,077	148,381	206,458	-57,402	+29,803	-27,599
1980	Total	7,982	212,644	220,626	82,924	161,947	244,871	-74,942	+50,698	-24,244
1981	Total	10,279	223,398	233,677	81,360	179,622	260,982	-71,081	+43,776	-27,305
1982	Total	12,729	199,464	212,193	86,409	178,643	243,952	-62,680	+20,921	-31,759
1983	January	1,142	16,090	17,232	5,142	14,985	20,127	-4,000	+1,105	-2,895
	February	833	15,479	16,312	3,704	15,100	18,804	-2,871	+378	-2,493
	March	822	15,868	16,690	3,865	15,663	19,528	-3,043	+206	-2,837
	April	850	15,245	16,095	3,763	16,151	19,914	-2,913	-906	-3,819
	May	750	14,905	15,655	5,033	16,413	21,446	-4,283	-1,508	-5,791
	June	791	16,168	16,959	4,787	16,149	20,936	-3,976	+19	-3,957
	July	644	15,842	16,486	5,164	16,664	21,829	-4,520	-821	-5,341
	August	824	15,758	16,582	5,703	17,011	22,714	-4,879	-1,253	-6,132
	September	778	16,479	17,257	5,571	16,880	22,451	-4,793	-402	-5,195
	October	899	16,334	17,033	5,872	18,461	24,333	-5,173	-2,127	-7,300
	November	889	16,374	17,063	4,951	18,164	23,115	-4,262	-1,790	-6,052
	December	739	16,559	17,298	4,417	18,559	22,976	-3,678	-2,000	-5,678
	Total	9,500	190,966	200,466	57,952	200,096	258,048	-48,452	-9,110	-57,562
1984	January	582	17,307	17,889	5,069	21,116	26,205	-4,507	-3,809	-8,316
	February	502	16,706	17,208	5,006	21,414	26,420	-4,504	-4,708	-9,212
	March	790	17,116	17,906	5,323	21,825	26,948	-4,533	-4,510	-9,043
	April	759	16,761	17,520	5,629	22,445	28,074	-4,870	-5,683	-10,553
	May	801	17,077	17,878	4,896	21,316	26,012	-3,795	-4,239	-8,034
	June	872	16,833	17,705	5,206	20,070	25,276	-4,334	-3,237	-7,571
	July	765	18,389	19,154	5,434	25,900	31,334	-4,669	-7,511	-12,180
	August	878	17,245	18,123	4,886	21,980	26,866	-4,008	-4,735	-8,743
	September	820	17,390	18,210	4,663	23,746	28,409	-3,843	-6,357	-10,200
	October	757	17,654	18,411	5,188	21,615	26,783	-4,411	-3,961	-8,372
	November	712	17,683	18,395	5,207	22,124	27,331	-4,495	-4,442	-8,937
	December	973	18,169	19,142	4,672	21,261	25,933	-3,699	-3,092	-6,791
	Total	9,311	206,554	217,865	60,980	264,748	325,728	-51,669	-56,193	-107,861
1985	January	804	18,597	19,401	4,434	23,863	28,297	-3,630	-5,266	-8,896
	February	786	17,067	17,853	3,969	23,996	27,965	-3,203	-6,928	-10,131

NA = Not available.
Notes • Annual totals are unadjusted and may not equal the sum of monthly totals, which are adjusted for seasonal and working-day variation, if present and identifiable.
• The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. customs territory (which is comprised of the 50 States, the District of Columbia, and Puerto Rico) and the Virgin Islands.
Additional Notes and Sources • See the last page of the section.